

PREFACE

The sixth edition of the Diet Manual is a resource for health care professionals within the Department of Veterans Affairs. The contents represent the latest developments in the field of applied nutrition and current dietetic practice.

The primary purpose of the manual is to provide dietetic guidelines for the nutritional management of clinical disorders, targeted to the veteran population. Diets range from the regular hospital diet to modified diets requiring multiple restrictions. Any combination of up to five diets may be ordered. Often modifications will need to be made for the individual patient. References are listed to assist in making these modifications. In addition, the format of each diet includes: purpose, diet principles, approximate composition, statement of nutritional inadequacy, food lists and suggested menu patterns. Following the body of the manual are appendixes which offer tables and common calculations procedures that the practicing dietitian will find helpful.

This original manual was approved by the Hines VA Hospital medical staff through the Nutrition Monitoring Committee. It has been revised to provide information regarding the diets to best serve the patients in Network 2.

Diet Manual will be reviewed by JCAHO Network 2 Workgroup in accordance with policy.

The dietitian may be contacted for patients who require additional modifications for religious or ethnic reasons.

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DIET MANUAL

Sixth Edition

Department of Veterans Affairs



**By the Nutrition & Food Service Staff of
VA Upstate New York Network 2
Fiscal Year - 2002**

NUTRITIONAL CONTENT OF DIETS

RECOMMENDED DIETARY ALLOWANCES AND MENU PLANNING:

The Regular Diet is planned to comply with VA guidelines and to meet or exceed the Recommended Dietary Allowances for essential nutrients as established by the Food and Nutrition Board of the National Research Council 1990 (Appendix A). It is based on the requirement of a moderately active, normal male of 51 years whose weight is 70 kilograms. Diets will be adjusted based on gender or age according to the Recommended Dietary Allowances (Appendix C)

NUTRITIONAL ANALYSIS OF DIETS:

In order to assure the targeted nutrient levels are being met for each diet, a nutritional analysis of a weeks worth of actual menus planned for each diet has been done. All diet are analyzed using the nutritional analysis software in the Dietetics Program of The Veterans Health Information Systems and Technology Architecture (VISTA). The nutrient data base for this software is the most current release of the United States Department of Agriculture (USDA) Data Set 456-3 File and other validated reference sources. A nutrient analysis on selected diets will be completed annually.

TARGETED NUTRIENT LEVEL OF DIETS:

The Regular Diet is the basis for all modified diets in this manual. The suggested menu pattern for each diet is planned following the regular diet format with appropriate adjustments for the diet restrictions listed. A targeted nutrient level is also listed for each diet based on the diet restrictions and the suggested menu pattern. Each diet is planned to meet the targeted nutrient level on an average daily basis with an acceptable range of plus or minus ten percent. Specific values for kilocalories, protein, fat, and carbohydrate are listed with each diet. Other nutrients may also be listed if diet is specific for that nutrient, such as, cholesterol, fiber, etc.

ADEQUACY:

Nutritional inadequacies in any diet will be noted following the approximate composition.

REGULAR DIET

PURPOSE:

This diet is designed to meet the nutritional needs of the adult male whose medical condition does not require dietary restrictions. This diet forms the basis of all other diets.

DIET PRINCIPLES:

- 👉 The diet is intended to promote healthy food consumption in accordance with U.S. Dietary Guidelines.
- 👉 This diet is planned to provide 30-35% calories from fat, 15-20% from protein and 45-55% calories from carbohydrate. There are limitations in the use of fried foods, high cholesterol meats, whole eggs and pastries.
- 👉 Margarine and 2% milk are served.
- 👉 Use of high sodium processed meats and food is controlled.
- 👉 Five fruits and vegetables are recommended in accordance with the National Cancer Institution guidelines.

TARGETED NUTRIENT LEVEL:

This diet is planned to meet the targeted nutrient level listed on a daily basis. A range of plus or minus 10% of the targeted level is acceptable. A week of menus have been analyzed.

Targeted Level:		Usual Daily Range:	
Kilocalories:	2400 - 2600	Cholesterol	250-350 gm
Protein:	105 gm	Sodium	4.5-5.5 gm
Fat:	90 gm	Potassium	2.8-3.3 gm
Carbohydrate:	300 gm	Fluid	1500-2000 cc

SUGGESTED MENU PATTERN:

Breakfast

1 svg Fruit and/or
4 oz juice
6 oz Cereal, Hot or
1 oz Cereal, Dry
1 Egg/Sub
2 slices Toast
2 tsps Margarine
1 Jelly
8 oz Milk
6 oz Beverage

Noon

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable or
6 oz Soup w/Crax
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

Evening

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

One package salt and pepper are served with each meal.
Two packages sugar are served with breakfast meal.
One package sugar is served with noon and evening meals.

REGULAR SIX FEEDING DIET

PURPOSE:

This diet is designed to provide adequate nutrition in six small equally distributed meals per day. It may be used for patients undergoing cancer therapy and/or experiencing early satiety and those patients with medical or surgical conditions including, but not limited to reactive hypoglycemia, dumping syndrome, gastric or colon surgeries.

DIET PRINCIPLES:

- 👉 This diet follows the diet principles of the regular diet.
- 👉 Nutrient dense foods and/or supplements are provided with each feeding.
- 👉 Dual feeding (oral and tube feedings) may be initiated to meet nutritional needs.
- 👉 This diet may need to be modified for fluid and total fat content to meet the needs of the post gastrectomy dumping syndrome patient.

It is recommended that this diet be individualized in accordance with patient's need and tolerance.

TARGETED NUTRIENT LEVEL:

Targeted Level:		Usual Daily Range:	
Kilocalories:	2400	Cholesterol	250-350 gm
Protein:	105 gm	Sodium	4.5-5.5 gm
Fat:	90 gm	Potassium	2.8-3.3 gm
Carbohydrate:	300 gm	Fluid	1500-2000 cc

SUGGESTED MENU PATTERN:

Breakfast

1 svg Fruit and/or
4 oz Juice
1 Egg/Sub
1 slice Toast
1 tsp Margarine
1 Jelly
4 oz Milk
6 oz Beverage

Noon

2 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable or
6 oz Soup/crax
1 tsp Margarine
1 svg Fruit/Dessert
4 oz Milk
6 oz Beverage

Evening

2 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable
1 tsp Margarine
1 svg Fruit/Dessert
4 oz Milk
6 oz Beverage

Nourishment:

Mid-Morning

4 oz Juice
1 oz Cereal, Dry
4 oz Milk
1 pkg Sugar

Mid-Afternoon

1/2 Sandwich
1 svg Fruit
4 oz Milk

Evening

1 svg Crackers with
Cheese or
Peanut Butter
4 oz Milk

One package sugar, salt and pepper are served at each meal.

REFERENCES FOR REGULAR DIETS:

1. Chicago and South Suburban Dietetic Association. *Manual of Clinical Dietetics*. 4th ed. American Dietetic Association; 1992.
2. Escott-Stump S. *Nutrition and Diagnosis-Related Care*. 3rd ed. Philadelphia, PA: Lea and Febiger; 1992.
3. Kennedy E, Meyers L, Layden W. The 1995 dietary guidelines for Americans: an overview. *J Am Diet Assoc*. 1996; 96:234-237.
4. Nelson JK, Moxness KE, Jensen MD, Gastineau CF, *Mayo Clinic Diet Manual*. 7th ed. St. Louis, MO: Mosby Year Book, Inc.; 1994.
5. Subcommittee on the Tenth Edition of the R.D.A.'s. Recommended Daily Allowances, 10th ed. Washington, DC: National Academy Press; 1989.
6. U.S. Department of Agriculture. Food Guide Pyramid. Stock Number 001-000-04587-3. Washington, DC: U.S. Government Printing Office, 1992.
7. U.S. Department of Agriculture and U.S. Department of Health and Human Services. Nutrition and Your Health: Dietary Guidelines for Americans, 4th ed. Home and Garden Bulletin Number 232. Washington. DC: USDA/USDHHS, December, 1995.

HIGH PROTEIN HIGH CALORIE DIET

PURPOSE:

This diet is designed to provide additional calories and protein for those individuals with increased nutritional needs.

DIET PRINCIPLES:

- 👉 This diet follows the regular diet guidelines with the addition of 1 egg, 2 ounces of meat, 2 milkshakes and additional bread choices.
- 👉 All foods are allowed.
- 👉 The diet should be individualized according to the needs of each patient.

TARGETED NUTRIENT LEVEL:

Kilocalories	3000
Protein	130 gm
Carbohydrate	340 gm
Fat	130 gm

SUGGESTED MENU PATTERN:

Breakfast

1 svg Fruit and/or
4 oz Juice
6 oz Cereal, Hot or
1 oz Cereal, Dry
2 Egg/Sub
2 slices Toast
2 tsps Margarine
1 Jelly
8 oz Milk
6 oz Beverage

Noon

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable or
6 oz Soup/Crax
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

Evening

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

Nourishment:

Noon

1 Milkshake

Evening

1 Milkshake

1 Sandwich

One package salt and pepper are served with each meal.

Two packages sugar are served with breakfast meal.

One package sugar is served at noon and evening meals.

VEGETARIAN DIET

PURPOSE:

This diet is designed for patients who choose to exclude meat/poultry entrees from their diet. Some vegetarians may exclude milk, eggs, cheese, and fish from their meal plan and will require modification. This plan would require additional modification to meet Vegan needs.

DIET PRINCIPLES:

- 👍 The recommended meal pattern is a sample of the lacto-ovo diet which allows eggs and dairy products.
- 👍 It is important in all vegetarian regimens to ensure a sufficient intake of calories from fat and carbohydrate to spare protein. Over the course of the day, the correct combination of protein foods should be eaten to provide a complete protein source.
- 👍 Protein containing foods may be combined to replace meat. Examples of some complementary combinations are:

cereals/milk	beans/cheese
pasta/cheese	rice/milk
bread/cheese	bread/egg
peanuts/milk	beans/wheat
beans/rice	lentils/rice
- 👍 Soy protein can be considered a complete protein since it is similar in composition to animal proteins.
- 👍 Diet maybe adjusted to patients preferences.
- 👍 Total vegetarian (vegan) diets tend to be high in folate, but low in vitamin B12, thus B12 supplementation is required. To prevent deficiencies when following a total vegetarian diet, the following nutrients should be included daily:

Nutrient

Vitamin B12

Sources

Vitamin B12 fortified soybean milk (minimum two servings per day for an average adult), fortified breakfast cereals or dietary supplement.

Riboflavin	Dark green leafy vegetables, nuts , mushrooms, enriched breads and cereals, and whole grain products.
Vitamin D	Fortified soybean milk, dietary supplement, sunlight.
Calcium	Dark green leafy vegetables, broccoli, okra, legumes, almonds, dried fruit, rutabagas, sesame and sunflower seeds, blackstrap molasses, fortified soybean milk, calcium precipitated tofu.
Iron	Dark green leafy vegetables, broccoli, enriched breads and cereals, whole grains, parsley, dried fruits, sweet potatoes, winter squash, legumes, blackstrap molasses, brewers yeast, wheat germ, nuts.
Zinc	Wheat germ, nuts, whole grains, legumes, parsley, corn.
Iodine	Iodized salt.

TARGETED NUTRIENT LEVEL:

Kilocalories:	2400	Fat:	90 gm
Protein:	105 gm	Carbohydrate:	300 gm

SUGGESTED MENU PATTERN:

Breakfast

1 svg Fruit and/or
4 oz Juice
6 oz Cereal, Hot or
1 oz Cereal, Dry
1 Egg/Sub
2 slices Toast
2 tsps Margarine
1 Jelly
8 oz Milk
6 oz Beverage

Noon

3 oz Meat Sub
4 oz Potato/Sub
4 oz Vegetable or
6 oz Soup/Crax
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

Evening

3 oz Meat Sub
4 oz Potato/Sub
4 oz Vegetable
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

One package salt and pepper are served with each meal.
Two packages sugar are served with breakfast meal.
One package sugar is served at noon and evening meals.

REFERENCES FOR VEGETARIAN DIET:

1. American Dietetic Association. Position of the American Dietetic Association: Vegetarian diets. *J Am Diet Assoc.* 1993; 93: 1317-1319.
2. American Dietetic Association. *Manual of Clinical Dietetics*. 4th ed. American Dietetic Association; 1992.
3. Henley E. FDA proposed labeling rules for protein. *J Am Diet Assoc.* 1992; 92; 293-296.
4. Nelson JK, Moxness KE, Jensen MD, Gastineau CF. *Mayo Clinic Diet Manual*. 7th ed. St. Louis, MO: Mosby Year Book, Inc. 1994.

CLEAR LIQUID DIET

PURPOSE:

This diet is frequently ordered for patients as an initial feeding following surgery or period of intravenous feeding or during acute illness.

DIET PRINCIPLES:

- 👉 The diet provides fluids but leaves no residuals after digestion.
- 👉 It minimizes stimulation of the gastrointestinal tract.
- 👉 All foods served are liquid or become liquid at room temperature.

TARGETED NUTRIENT LEVEL:

Targeted Level:		Usual Daily Range:	
Kilocalories:	1000	Sodium	2.8-3.3 gm
Protein:	15 gm	Potassium	0.8-1.0 gm
Fat:	trace		
Carbohydrate:	250 gm		

ADEQUACY:

Inadequate in calories and all essential nutrients except ascorbic acid. Designed for short term use. If on more than three days, a nutritional supplement is recommended.

SUGGESTED MENU PATTERN:

Breakfast

6 oz Broth
8 oz Juice
4 oz Gelatin
6 oz Beverage

Noon

6 oz Broth
8 oz Juice
8 oz Gelatin
6 oz Beverage

Evening

6 oz Broth
8 oz Juice
8 oz Gelatin
6 oz Beverage

One package sugar and salt are served with each meal.

FOOD LIST:

<u>Food Group</u>	<u>Foods Allowed</u>	<u>Not Allowed</u>
BEVERAGES	Carbonated beverages; coffee; tea; as tolerated	Alcoholic beverages
BREADS & CEREALS	None	All
DESSERTS	Fruit ice; plain gelatin	All others
FAT	None	All
FRUIT & FRUIT JUICES	Clear juices such as apple, cranberry, grape & lemonade	All others including juice with pulp; nectars
<u>MEAT GROUP:</u>		
CHEESE	None	All
EGGS, FISH, MEAT, POULTRY	None	All
MILK & MILK PRODUCTS	None	All
POTATOES & POTATO SUBSTITUTES	None	All
SOUP	Clear bouillon or broth	All others
SWEETS	Hard candy; honey; sugar; sugar substitutes	All others
VEGETABLES & VEGETABLES JUICES	None	All
MISCELLANEOUS	Salt	All others

REFERENCES FOR CLEAR LIQUID DIET:

1. American Dietetic Association. *Handbook of Clinical Dietetics*. 2nd ed. New Haven, CT: Yale University Press; 1992.
2. Jerry L. Prestis V.A. Hospital. *Diet Manual*. Loma Linda, CA; 1991.
3. Nelson JK, Moxness KE, Jensen MD, Gastineau CF. *Mayo Clinic Diet Manual*. 7th ed. St. Louis, MO: Mosby Year Book, Inc.; 1994.
4. Northport V.A. Hospital. *Diet Manual*. Northport, NY; 1992.

FULL LIQUID DIET

PURPOSE:

This diet is designed for patients who cannot chew or swallow due to esophageal stricture, anatomical abnormalities or head/neck surgeries. The diet is most frequently used as a transition between clear liquids and solid food and provides little stimulation to the gastrointestinal tract.

DIET PRINCIPLES:

- 👉 All foods served are liquid or will become liquid at room temperature.
- 👉 Diet may be adjusted to patient's tolerance.
- 👉 Diet is a nutritious alternate to clear liquid for patients still too weak to chew.

TARGETED NUTRIENT LEVEL:

Targeted Level:

Kilocalories:	2200
Protein:	75 gm
Fat:	70 gm
Carbohydrate:	300 gm

Usual Daily Range:

Sodium	4.0-5.0 gm
Potassium	2.8-3.3 gm

ADEQUACY:

This diet is inadequate in folacin and iron. If it is used for 2 or more weeks, a liquid vitamin/mineral supplement is recommended.

SUGGESTED MENU PATTERN:

Breakfast

8 oz Juice
6 oz Cereal
1 tsp Margarine
4 - 6 oz Supplement
8 oz Milk
6 oz Beverage

Noon

6 oz Cream Soup
8 oz Juice
4 - 6 oz Supplement
1 svg Dessert
8 oz Milk
6 oz Beverage

Evening

6 oz Cream Soup
8 oz Juice
4 - 6 oz Supplement
1 svg Dessert
8 oz Milk
6 oz Beverage

One package salt is served with each meal.

Two packages sugar are served with breakfast meal.

One package sugar is served with noon and evening meals.

FOOD LIST:

<u>Food Group</u>	<u>Foods Allowed</u>	<u>Not Allowed</u>
BEVERAGES	Carbonated beverages, cocoa, coffee, tea; high calorie, high protein oral supplements.	Alcoholic beverages
BREADS & CEREALS	Refined or strained cooked cereals.	All others
DESSERTS	Custards, plain flavored gelatin, ice cream, pudding, sherbet.	All others made with coconut, whole fruit, nuts or seeds.
FATS	Butter or margarine; cream; cream substitutes	All others
FRUIT & FRUIT JUICES	Fruit juices; nectars	All fruits
<u>MEAT GROUP:</u> CHEESE, FISH, BEEF, PORK, LAMB, POULTRY	None	All
EGGS	Eggs in eggnog or custards only	All others
MILK & MILK PRODUCTS	Milk & milk beverages; smooth yogurt	All others
POTATOES & POTATO SUBSTITUTES	Mashed potatoes in strained creamed soups	All others
SOUPS	Bouillon, broth; strained cream soups	All others
SWEETS	Honey; sugar; sugar substitutes; syrups	All others
VEGETABLES & VEGETABLE JUICES	All vegetable juices	All vegetables
MISCELLANEOUS	Flavorings; salt; spices in moderation	Chili; meat sauces; pepper; and all other seasonings and condiments

REFERENCES FOR FULL LIQUID DIET:

1. American Dietetic Association. *Handbook of Clinical Dietetics*. 2nd ed. New Haven, CT: Yale University Press; 1992.
2. Jerry L. Prestis V.A. Hospital. *Diet Manual*. Loma Linda, CA; 1991.
3. Nelson JK, Moxness KE, Jensen MD, Gastineau CF. *Mayo Clinic Diet Manual*. 7th ed. St. Louis, MO: Mosby Year Book, Inc.; 1994.

Northport V.A. Hospital. *Diet Manual*. Northport, NY; 1992.

PUREED DIET

PURPOSE:

The pureed diet is designed to provide soft foods which can be swallowed with minimal or no chewing.

DIET PRINCIPLES:

- 👉 Blenderized foods are stabilized with a variety of products to obtain a consistency similar to pudding or mashed potatoes and to increase palatability.
- 👉 The diet may be adjusted to the patient's tolerance.
- 👉 If liquids cause choking, the diet can be modified to restrict thin liquids and/or thickened liquids can be ordered. If a liquid restriction is imposed, patients should be closely monitored for adequate hydration.

TARGETED NUTRIENT LEVEL:

Kilocalories	2400	Fat	90 gm
Protein	105 gm	Carbohydrate	300 gm

SUGGESTED MENU PATTERN:

Breakfast

1 svg Pureed Fruit and/or
4 oz Juice
6 oz Cereal, Hot
2 Eggs/Sub
2 tsp Margarine
8 oz Milk
6 oz Beverage

Noon

6 oz Cream Soup
3 oz Pureed Meat/Sub
4 oz Mashed Potato/Sub
2 oz Gravy
4 oz Pureed Vegetable
2 tsp Margarine
1 svg Pureed Fruit/Dsrt
8 oz Milk
6 oz Beverage

Evening

6 oz Cream Soup
3 oz Pureed Meat/Sub
4 oz Mashd Potato/Sub
2 oz Gravy
4 oz Pureed Vegetable
2 tsp Margarine
1 svg Pureed Frt/Dsrt
8 oz Milk
6 oz Beverage

2:00 p.m. Supplement – 8 oz milkshake

One package salt and pepper are served with each meal.

Two packages sugar are served with breakfast meal.

One package sugar is served with noon and evening meals.

FOOD LIST:

<u>Food Group</u>	<u>Allowed</u>	<u>Not Allowed</u>
BEVERAGES	All	None
BREADS	None	All
CEREALS	Cooked cereals	All others
DESSERTS	Plain custard; gelatin; ice cream; mousse; pudding; sherbet; smooth yogurt	Rice pudding; any with coconut, fruit or nuts. All others.
FATS	Mashed ripe avocado; cream; cream substitutes; cooking fats & oils; gravy; margarine; mayonnaise; plain smooth salad dressings; sauces; sour cream; whipped cream or topping	All others
FRUITS & FRUIT JUICES	Smooth applesauce; mashed or ripe banana as tolerated; all other pureed fruits ; juices; and nectars	All others
<u>MEAT GROUP:</u> CHEESE	Creamed or small curd cottage cheese; cheese sauce; melted cheese in prepared foods	All others
EGGS	Custard; scrambled eggs or egg substitute, omelet	All others
FISH	Pureed fish	All others
MEAT ENTREES/ MEAT SUBSTITUTES	Pureed casseroles; pureed meat; pureed tofu	All others
POULTRY	Pureed poultry	All others
MILK & MILK PRODUCTS	All	None

<u>Food Group</u>	<u>Allowed</u>	<u>Not Allowed</u>
POTATO & POTATO SUBSTITUTES	Pureed pasta or rice; Mashed white or sweet potatoes	All others
SOUP	Broth or bouillon; strained creamed soups; soup with pureed vegetables	All others
SWEETS	Honey; jelly; sugar; sugar substitutes; syrups	All others
VEGETABLES & VEGETABLE JUICES	Pureed cooked vegetables without seeds or skins; mashed winter squash; vegetable juice	All others
MISCELLANEOUS	Flavoring agents; pepper; salt; powdered spices	All others

REFERENCES FOR PUREED DIET:

1. Jerry L. Prestis V.A. *Hospital Diet Manual*. Loma Linda, CA; 1991.
2. Nelson JK, Moxness KE, Jensen MD, Gastineau CF. *Mayo Clinic Diet Manual*. 7th Ed. St. Louis, MO: Mosby Year Book, Inc.; 1994.
3. Northport V.A. *Diet Manual*. Northport, NY; 1992.

DYSPHAGIA DIET

PURPOSE:

This diet is designed for patients experiencing swallowing and/or chewing difficulties. Dysphagia has been observed in conditions such as stroke, neuromuscular disease, head and neck cancer, surgical procedures involving the head and neck, and as a consequence of aging. The main goal of nutritional management is the prevention of aspiration and the provision of adequate nutrient intake.

DIET PRINCIPLES:

- 👉 A diet order and a fluid consistency order should be placed on all patients with dysphagia. Thick liquids will be served with the dysphagia diet.
- 👉 Foods that are sticky, crumbly, crunchy, chewy, multi-textured or that fall apart are not included. Moist and semi-solid foods (high profile consistency) that form a cohesive bolus in the mouth are preferred.
- 👉 Spicy foods or citrus juices may be deleted from the diet for patients with oral pharyngeal inflammation.
- 👉 A swallow evaluation may need to be completed by a Speech Pathologist to assess the appropriate consistency needed. The patient should be re-evaluated to upgrade consistency, as dysphagia is usually a transitory condition.
- 👉 Modifications can be made for variations such as the number of calories and sodium or cholesterol content.

TARGETED NUTRIENT LEVEL:

All levels of dysphagia diet with the normal (all liquids) allowed are targeted to meet the following:

Kilocalories	2500		
Protein	95 gm	Carbohydrate	300 gm
Fat	95 gm	Fluid	2000 cc

If thick liquids are required, calories and carbohydrate levels will increase.

Dysphagia

SUGGESTED MENU PATTERN:

*Dysphagia liquids are thickened according to level ordered.

Breakfast

1 svg Puree Fruit and/or
4 oz Juice*
6 oz Cereal, hot
2 Eggs/Egg sub
2 tsp Margarine
8 oz Milk*

Noon

6 oz Cream Soup
4 oz Pureed Meat/Sub
4 oz Mashed Potato/Sub
2 oz Gravy
4 oz Pureed Vegetable
2 tsp Margarine
4 oz Juice*
1 svg Pureed Fruit/
Dessert
8 oz Milk*

Evening

6 oz Cream Soup
4 oz Pureed
Meat/Sub
4 oz Mashed Pot
/Sub
2 oz Gravy
4 oz Pureed Veg
2 tsp margarine
4 oz Juice*
1 svg Pureed Frt/
Dessert
8 oz Milk*

One package salt and pepper are served with each meal.

Two packages sugar are served with breakfast meal.

One package sugar is served with noon and evening meal.

FOOD LIST:

Food Group

Allowed

Not Allowed

BEVERAGES

Liquids

Only those thickened to honey
consistency or thicker

All others

BREADS

None

All

CEREALS

Cooked cereals

All others

DESSERTS

Plain custard; mousse;
pudding; smooth yogurt,
*fruited Citrotein gelatin

Gelatin, plain or with
whole fruit: ice cream
sherbet, sorbet. All others

<u>Food Group</u>	<u>Allowed</u>	<u>Not Allowed</u>
FATS	Mashed ripe avocado; butter; cooking fats; gravy; cooking oils; margarine; mayonnaise; plain smooth salad dressings; sauces; sour cream; whipped cream or topping	Bacon; nuts; all others
FRUITS AND FRUIT JUICES	Applesauce; mashed ripe banana; pureed fruits	All others
	Only those thickened to honey consistency or thicker	All others
<u>MEAT GROUP:</u>		
CHEESE	Cheese sauces, small curd or pureed cottage cheese	Large curd cottage cheese; all others
EGGS	Custard; scrambled eggs or egg substitute, omelet	All others
FISH	Pureed fish with cream sauce or bound with thick dressing	All others
MEAT/ENTREES	Pureed casseroles; pureed meat (high profile consistency) with gravy; pureed tofu	All others
POULTRY	Pureed poultry (high profile consistency) with gravy	All others
MILK AND MILK PRODUCTS	Smooth yogurt; milk products thickened to honey consistency or thicker	All others not thickened
POTATOES AND POTATO SUBSTITUTES	Mashed white or sweet potatoes with gravy; pureed pastas with sauces	All others
SOUPS Thick Liquids	Thickened blenderized soups	All others
SWEETS	Honey; sugar	All others

<u>Food Group</u>	<u>Allowed</u>	<u>Not Allowed</u>
VEGETABLES AND VEGETABLE JUICES	Pureed cooked vegetables without seeds or skin; mashed winter squash	All others
MISCELLANEOUS	Flavoring extracts; pepper; salt; powdered spices	All others

* According to recommended recipe only.

REFERENCES FOR DYSPHAGIA DIET:

1. Chicago and South Suburban Dietetic Association. *Manual of Clinical Dietetics*. 4th ed. Chicago, IL: American Dietetic Association; 1992.
2. Curran J, Goher ME. Development and dissemination of an aspiration risk reduction diet. *Dysphagia*. 1990; 5: 6-12.
3. Goher ME, McKaig TN. Dysphagia and dietary levels in skilled nursing facilities. *J Am Geriatric Soc*. 1995; 43: 528-32.
4. Hotaling DL. Nutritional consideration for the pureed diet texture in dysphagic elderly. *Dysphagia*. 1992; 7: 81-5.
5. Lawrence K. DiLima SN, ed. *Dietitian's Patient Education Manual*. Vol 2. Gaithersburg, MD: Aspen Reference Group. Aspen Publishing Inc.; 1993.
6. Martin AW. Dietary management of swallowing disorders. *Dysphagia*. 1991; 6: 129-134.
7. Nelson JK, Moxness KE, Jensen MD, Gastineau CF. *Mayo Clinic Diet Manual*. 7th ed. St. Louis, MO: Mosby Year Book, Inc.; 1994.
8. *Michael Reese Hospital and Medical Center Diet Manual*. Chicago, IL: The Marriott Corp.; 1994.
9. O'Gara JA. Dietary adjustments and nutritional therapy during treatment for oral-pharyngeal dysphagia. *Dysphagia*. 1990; 4: 209-12.
10. Pardow EM. Development of a multistage diet for dysphagia. *J Am Diet Assoc*. 1993; 93: 568-71.
11. *St. Francis Hospital of Evanston Diet Manual*. Evanston, IL: The Marriott Corp.; 1993.
12. Stanek K, Hensley C, Van Riper C. Factors affecting use of food and commercial agents to thicken liquids for individuals with swallowing disorders. *J Am Diet Assoc*. 1992; 92: 488-90.
13. *VA Westside Medical Center Diet Manual*. Chicago, IL; 1993.

MODIFIED/THICKENED LIQUIDS DIET

PURPOSE:

This diet is designed for the neurologically impaired patient with suspected or confirmed oropharyngeal dysphagia, who is unable to sustain sufficient hydration without modifying consistency of fluids served, and who are at increased risk of an aspiration event because they cannot swallow thin liquids.

DIET PRINCIPLES:

- 👉 Fluids that meet patients' hydration needs are served in a form they can swallow.
- 👉 Thickened liquids will be served with a regular consistency unless otherwise ordered.
- 👉 Thickened fluids may be served with any other consistency or therapeutic diet modification.
- 👉 Thin liquids are avoided.

TARGETED NUTRIENT LEVEL:

Kilocalories	2045	Fat	29 gm
Protein	64.5 gm	Carbohydrates	384 gm
Sodium	2717 mg	Potassium	3149 mg

SUGGESTED MENU PATTERNS:

The following menu patterns outline available fluids for each level.

THICK LIQUIDS – LEVEL I: (Nectar)

BREAKFAST	NOON	EVENING
4 oz Juice, Thick I 8 oz Milk, Thick I	4 oz Juice, Thick I 8 oz Milk, Thick I	4 oz Juice, Thick I 8 oz Milk, Thick I

THICK LIQUIDS – LEVEL II: (Honey)

BREAKFAST	NOON	EVENING
4 oz Juice, Thick II 8 oz Milk, Thick II	4 oz Juice, Thick II 8 oz Milk, Thick II	4 oz Juice, Thick II 8 oz Milk, Thick II

THICK LIQUIDS – LEVEL III: (Pudding)

BREAKFAST	NOON	EVENING
4 oz Juice, Thick III 8 oz Smooth Yogurt	4 oz Juice, Thick III 8 oz Smooth Yogurt	4 oz Juice, Thick III 8 oz Smooth Yogurt

SOFT (Ground Meat) DIET

PURPOSE:

This diet is modified from the Regular diet in texture only. There is no restriction on seasoning. This diet offers foods that are easy to chew. Patients who easily fatigue can also benefit from a soft diet.

Diet should be individualized to patient tolerance.

DIET PRINCIPLES:

- 👉 Crunchy, hard or dense texture, and deep fat fried foods are eliminated.

TARGETED NUTRIENT LEVEL:

Kilocalories	2400	Fat	90 gm
Protein	105 gm	Carbohydrates	300 gm

SUGGESTED MENU PATTERN:

Breakfast

1 svg Fruit and/or
4 oz Juice
6 oz Cereal, Hot or
1 oz Cereal, Dry
1 Egg/ Sub
2 slices Toast
2 tsps Margarine
1 Jelly
8 oz Milk
6 oz Beverage

Noon

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable or
6 oz Soup/Crax
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

Evening

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

One package salt and pepper are served with each meal.
Two packages sugar are served with breakfast meal.
One package sugar is served with noon and evening meals.

FOOD LIST:

<u>Food Group</u>	<u>Allowed</u>	<u>Not Allowed</u>
BEVERAGES	All	None
BREADS	Bread/Toast; crackers; biscuits bread dressing; coffee cake; cake or glazed doughnuts; French toast; muffins; pancakes; dinner rolls; sweet rolls; waffles	Bagels; hard rolls, any bread product with coconut, dried fruit, nuts, or seeds
CEREALS	Cooked cereals; dry cereals	Granola; grape-nuts; all with coconut, dried fruits, nuts or seeds
DESSERTS	Cakes; cobblers; soft cookies; custard; allowed fruits; fruit ice; gelatin; ice cream; mousse; pies; pudding; sherbet; yogurt	Any dessert with coconut, dried fruits or fruits not allowed, nuts or seeds
FATS	All but those listed to avoid	Nuts and olives
FRUITS AND FRUIT JUICES	All fruit juices and nectars; baked, cooked or canned fruits such as: apples (without skin), applesauce, apricots, blueberries, cherries, fruit cocktail, mandarin oranges, peaches, pears, pineapple or plums; cooked / dried fruits without pits; frozen berries; jellied cranberry sauce; kiwi; orange or tangerine without membranes; raw grapefruit; ripe banana or melon	Raw fruits except those allowed; whole cranberry sauce; whole prunes and dried fruits
<u>MEAT GROUP:</u> CHEESE	All except those not allowed	Any with seeds or nuts
EGGS	All	None

<u>Food Group</u>	<u>Allowed</u>	<u>Not Allowed</u>
FISH	Boneless, skinless, baked or poached fish, salmon or tuna creamed or in combination dishes; salmon or tuna salad without raw vegetables	Crispy fried fish; shellfish; all others
MEAT/ENTREES	Casseroles; ground or finely diced meats; hash; meatballs; meatloaf; stews with finely diced or ground meat; tofu; skinless sausage links or patties	Cold cuts; all other sausages; whole frankfurters; fried meats; chunky peanut butter; sliced or whole meats
POULTRY	Finely diced or ground poultry; chicken or turkey salad without raw vegetables	Chunk, sliced or whole poultry; fried chicken; chicken nuggets or patties
MILK AND MILK PRODUCTS	All	None
POTATOES AND POTATO SUBSTITUTES	Pasta; rice and white or sweet potatoes without skin, pasta or potato salad without raw vegetables; dried beans, lentil, peas	Potato chips; crispy french fries, hash browns, home fries, shoestring potatoes
SOUPS	Bouillon; broth and those made with allowed vegetables	Soups made with Vegetables to avoid
SWEETS	Soft chocolates; honey; jam; jelly; sugar; syrup; chocolate syrup	Hard candies or candies with caramel; dried fruits; nuts; coconut; jams or preserves with seeds;
VEGETABLES AND VEGETABLE JUICES	Well-cooked or canned asparagus, green or wax beans, beets, broccoli, cabbage, carrots, cauliflower, celery, cream style corn; eggplant, mushrooms, onions, peas, green peppers, raw vegetables (finely chopped), chopped spinach, summer squash, winter squash, tomato; all vegetable juice; sauerkraut	Corn; lima beans, mixed vegetables; succotash; raw vegetables; salad greens; coleslaw; fried or stir-fried vegetables

Food Group
MISCELLANEOUS

Allowed
Flavoring extracts; herbs;
pepper; salt; seasonings
not restricted

Not Allowed
Chili peppers; coconut;
pickles; popcorn;
crunchy snack food;
seeds

REFERENCES FOR SOFT DIET:

1. Burtis G, Davis J, Martin S. *Applied Nutrition and Diet Therapy*. Philadelphia, PA: W.B. Saunders Co.; 1988.
2. Greksa LP, Parraga I, Clark CA. The dietary adequacy of edentulous older adults. *J Pros Dentistry*. 1995; 73: 142-145.
3. Marotta R, Floch M. Diet and Nutrition in Ulcer Disease. *Medical Clinics of North America*. 1991; 75(4):967-79.
4. Robinson C, Weigley E, Mueller D. *Basic Nutrition and Diet Therapy*. New York: Macmillan Publishing Co.; 1993.
5. Whitney E, Cattalo C, Rolfes S. *Understanding Normal and Clinical Nutrition*. St. Paul, MN: West Publishing Co.; 1991.

GERIATRIC (Cut/Chopped Meat) DIET

PURPOSE:

This diet is designed to provide adequate nutrition for the geriatric resident who may require dietary modifications due to the aging process.

This diet emphasizes increased fluids and high fiber foods. Impaired dentition and manual dexterity may require further diet modification. Individuality is the key to dietary alterations for the elderly patient.

PRINCIPLES:

- 👉 The diet follows the Regular Diet with incorporation of high fiber bread, soups and juices.
- 👉 Diet can be individualized to include sandwiches and finger foods depending on patient abilities. Whole meats, frankfurters, knockwurst will be cut/chopped to approx. 1/2 - 3/4 " pieces.
- 👉 Some patients may benefit from "Finger Foods" to minimize having to use eating utensils. Consult the dietitian to individualize the menu for the patient

TARGETED NUTRIENT LEVEL:

Kilocalories	2400	Fat	90 gm
Protein	105 gm	Carbohydrate	300 gm

SUGGESTED MENU PATTERN:

Breakfast

1 svg Fruit and/or
4 oz Juice
6 oz Cereal, Hot or
1 oz Cereal, Dry
1 Egg/Sub
2 slices Toast
2 tsps Margarine
1 Jelly
8 oz Milk
6 oz Beverage

Noon

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable or
6 oz Soup/Crux
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

Evening

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

One package salt and pepper are served with each meal.
Two packages sugar are served with breakfast meal.
One package sugar is served with noon and evening meals.

FOOD LIST:

<u>Food Group</u>	<u>Foods Allowed</u>	<u>Not Allowed</u>
BEVERAGES	All	None
BREADS	All, whole grain preferred	None
CEREALS	All, high fiber cereals preferred	None
DESSERTS	All	None
FATS	All	None
FRUITS AND FRUIT JUICES	All except those listed to avoid	Fresh apples and pears unless tolerated
<u>MEAT GROUP:</u>		
CHEESE	All	None
EGGS	All	None
FISH	All	Crispy Fried Fish

<u>Food Group</u>	<u>Foods Allowed</u>	<u>Not Allowed</u>
MEAT/ENTREES POULTRY	All meats cut/chopped to ½ – ¾" pieces. Convenience entrees, cut/chopped frankfurters; knockwurst; soft luncheon meats, breakfast sausage	Crispy Fried Meats/ entrees, whole meats
MILK AND MILK PRODUCTS	All	None
POTATOES AND POTATO SUBSTITUTES	All except those listed to avoid	Crispy Fried Potatoes
SOUPS	All	None
SWEETS	All	None
VEGETABLES AND VEGETABLE JUICES	All cooked, whole vegetables except those listed to avoid	Corn on the cob; plain raw vegetables unless tolerated

REFERENCES FOR GERIATRIC DIET:

1. Chernoff R. *Geriatric Nutrition: The Health Professional's Handbook*. Gaithersburg, ML: Aspen Publishing, Inc., 1991.
2. Di Lima SN. *Dietitian's Patient Education Manual: Volume 1*. Gaithersburg, MD. Aspen Publishing, Inc., 1993.
3. Greksa LP, Parraga IM, Clark CA. The dietary adequacy of edentulous older adults. *J Pros Dentistry*. 1995; 73: 142-45.
4. Russell RM, Suter PM. Vitamin requirements of elderly people: an update. *Am Soc Clin Nutr*. 1993; 3: 4-14.
5. Thomas B. *Manual of Dietetic Practice, 2nd Ed*. Oxford, London: Blackwell Scientific Publishing, 1994.
6. Towers AL, Burgio KL, Locher JL, Merkel IS, Safaeian M, Wald A. Constipation in the elderly: influence of dietary fiber, psychological and physiological factors. *J Am Geri Soc*. 1994; 42: 701-06.
7. Whitney En, Cataldo CB, DeBruyne LK, Rolfes SR. *Nutrition for Health and Health Care*. Minneapolis, MN: West Publishing Co., 1996.

HIGH FIBER DIET

PURPOSE:

The high fiber diet is prescribed for prevention or therapy of gastrointestinal conditions such as chronic constipation, diverticulosis, irritable bowel syndrome, hemorrhoids, colon cancer and Crohn's disease.

A high fiber diet will increase fecal bulk, decrease intestinal transit time, and decrease intraluminal colonic pressure. It has also been associated with a decrease in the risk of colon cancer, a decrease in blood cholesterol levels and a decrease in glucose absorption rates. This diet is contraindicated for individuals with dyspepsia, diverticulitis, gastritis, and stenosis or narrowing of the intestinal tract.

DIET PRINCIPLES:

- 👉 This diet consists of an increased amount of insoluble and soluble fibers, providing approximately 25-30 grams of fiber per day. Insoluble fibers found in wheat bran, vegetables and whole grains do not dissolve in water and aid in the treatment of constipation, diverticulosis and prevention of colon cancer. Soluble fibers found in oat bran, dried beans and peas (legumes), and some fruits and vegetables form a gel in water and help maintain normal serum glucose and cholesterol levels.
- 👉 The National Academy of Sciences and the USDA recommend an average consumption of at least five servings of fruits and vegetables, and at least six servings of starches or complex carbohydrates every day.
- 👉 High fiber foods must be added gradually to the diet to allow for adequate gastrointestinal adjustment. Adequate fluids must be taken in conjunction with a high fiber diet (6 to 8 cups per day).
- 👉 Excessive fiber intakes (50-60 grams per day) may decrease absorption of various nutrients such as vitamin B12, zinc, calcium, phosphorous, copper and magnesium.

TARGETED NUTRIENT LEVEL:

Kilocalories	2400		
Protein	105 gm	Carbohydrate	320 gm
Fat	83 gm	Fiber	30 gm

SUGGESTED MENU PATTERN:

Breakfast

4 oz Fresh/Canned Fruit
 6 oz High Fiber Cereal, Hot or
 1 oz High Fiber Cereal, Dry
 1 Egg/ Sub
 2 slices Toast
 2 tsps Margarine

 1 Jelly
 8 oz Milk
 6 oz Beverage

Noon

3 oz Meat/Sub
 4 oz Potato/Sub
 4 oz Vegetable or
 6 oz Soup/Crux
 1 slice Whole
 Grain Bread
 1 tsp Margarine
 1 svg Fresh Fruit
 8 oz Milk
 6 oz Beverage

Evening

3 oz Meat/Sub
 4 oz Potato/Sub
 4 oz Vegetable
 2 oz Salad
 1 pkg Salad Drsg
 1 slice Whole
 Grain Bread
 1 tsp Margarine
 1 svg Fruit/Dessert
 8 oz Milk
 6 oz Beverage

One package salt and pepper are served with each meal.
 Two packages sugar are served with breakfast meal.
 One package sugar is served with noon and evening meals.

FOOD LIST:

<u>Food Group</u>	<u>Allowed</u>	<u>Not Allowed</u>
BEVERAGES	All	None
BREADS AND CEREALS	All Increase bran and whole grain breads/cereals; popcorn	None
DESSERTS	All Increase those with coconut, fruits, nuts and whole grains	None
FATS	All, especially nuts	None
FRUITS AND FRUIT JUICES	All Increase fruits with edible skins; blueberries; prunes; strawber- ries; fruit juice with pulp; prune juice	None
MEAT GROUP	All	None
MILK AND MILK PRODUCTS	All	None

<u>Food Group</u>	<u>Allowed</u>	<u>Not Allowed</u>
POTATOES AND POTATO SUBSTITUTES	All Increase pasta, especially whole grain; white and sweet potatoes with skin; brown rice	None
SOUPS	All	None
SWEETS	All	None
VEGETABLES AND VEGETABLE JUICES	All Increase cooked legumes and dried cooked peas; raw and cooked vegetables; all juices	None
MISCELLANEOUS	All herbs and seasonings; seeds	None

VALUES OF HIGH FIBER FOODS

<u>Food</u>	<u>Amount</u>	<u>Dietary fiber(grams)</u>
<i>BREADS AND CEREALS</i>		
40% Bran Flakes	1/2 cup	3.1
All-Bran	1/3 cup	8.8
Bread, pumpernickel	1 slice	3.8
Bread, whole wheat	1 slice	1.5 - 4
Brown rice, long grain	1 cup	3.3
Graham crackers, 2 1/2 in squares	3 crax	2.1
Oats, reg, quick, instant	1/2 cup	1.9
Pasta, spaghetti, enriched	1 cup	2.2
Popcorn	3 cup	3.0
Raisin Bran	1/2 cup	2.6
Shredded Wheat	3/4 cup	2.5
<i>FRUITS</i>		
Apple, unpeeled, 2 1/4 in dia	1	2.1
Apricot, dried	7 halves	5.8
Banana, 8 3/4 in long	1	2.2
Blueberries, raw	3/4 cup	3.7
Orange, 2 3/4 in dia	1	2.0
Oranges, Mandarin, cn	3/4 cup	2.4
Peach, raw, 2 3/4 in dia	1	2.1
Pear, raw, 2 3/4 in dia	1	2.8
Prunes, uncooked	3 med	4.0
Strawberries, raw	1 1/4 cup	4.1

VALUES OF HIGH FIBER FOODS

<u>Food</u>	<u>Amount</u>	<u>Dietary fiber(grams)</u>
<i>VEGETABLES AND LEGUMES</i>		
Beans, baked, cn	1/4 cup	2.9
Beans, kidney, cn	1/3 cup	3.8
Broccoli, cooked	1/2 cup	2.2
Broccoli, raw	1 cup	2.8
Carrots, cooked	1/2 cup	2.4
Carrots, raw	1/2 cup	3.6
Cauliflower, cooked	1/2 cup	1.6
Cauliflower, raw	1 cup	3.3
Corn, cooked	1/2 cup	3.9
Corn on the cob, 6 in long	1 ear	3.6
Lentils, cooked	1/3 cup	2.6
Onions, cooked	1/2 cup	2.2
Onion, raw	1 cup	5.0
Peas, black-eyed	1/3 cup	8.2
Peas, cooked	1/2 cup	4.1
Peas, fz	1/2 cup	4.9
Potato, bk with skin	3 oz	2.5
Potato, bk no skin	3 oz	2.0
Zucchini, cooked	1/2 cup	2.7
Zucchini, raw	1 cup	3.9

REFERENCES FOR HIGH FIBER DIET:

1. American Dietetic Association. *Manual of Clinical Dietetics*; 4th Ed. American Dietetic Association, 1992.
2. American Dietetic Association. Position of the American Dietetic Association: Health implications of dietary fiber. *J Am Diet Assoc.* 1997; 97(10): 1157-59.
3. Danilo B, Corazziari E, Habib FI, Tomei E, Bausano G, Magrini P, Anzini F, Torsoli A. Effect of wheat bran in treatment of chronic nonorganic constipation; A double-blind controlled trial. *Digest Dis and Sci.* 1995;40: 349-56.
4. Di Lima SN. *Dietitian's Patient Education Manual: Volume 1.* Gaithersburg, MD; Aspen Publishing, Inc.; 1993.

REFERENCES FOR HIGH FIBER DIET: (CONT.)

5. Humble CG, Malarcher AM, Tyroler HA. Dietary fiber and coronary heart disease in middle-aged hypercholesterolemic men. *Am J Prevent Med.* 1993; 9: 197-202.
6. Shankar S, Lanza E. Dietary fiber and cancer prevention. *Hem/Onc Clinic of N Amer.* 1991; 5: 25-41.
7. Shils ME, Olson JA, Shike M. *Modern Nutrition in Health and Disease*, 8th Ed. Malven, PA; Lea & Febiger; 1994.

BLAND DIET

PURPOSE:

This diet is designed for use postoperatively or for some gastrointestinal disturbances (acute gastric or duodenal ulcers, gastritis, irritable bowel syndrome). The diet may also be ordered when patients have many food intolerances. The diet may reduce discomfort caused by an ulcer, but has not been shown to heal or prevent ulcers.

DIET PRINCIPLES:

- 👍 Eliminate foods that may cause pain or stimulate increased gastric acid secretion and motility, such as pepper and chili powder.
- 👍 Caffeine Free or Decaffeinated Beverages allowed only.
- 👍 Consume meals at regularly scheduled times.
- 👍 Evening snacking is avoided due to the stimulation of acid secretion.
- 👍 Fried and high fat foods, which may irritate the gastrointestinal tract, are avoided.
- 👍 Fresh fruits are allowed unless they cause distress.
- 👍 The diet for each patient is individualized to tolerance.

TARGETED NUTRIENT LEVEL:

Targeted Level:

Kilocalories:	2400
Protein:	105 gm
Fat:	90 gm
Carbohydrate:	300 gm

Usual Daily Range:

Cholesterol	250-300 gm
Sodium	4.5-5.5 gm
Potassium	2.8-3.3 gm
Fluid	1500-2000 cc

SUGGESTED MENU PATTERN:

Breakfast

1 svg Fruit and/or
4 oz Juice
6 oz Cereal, Hot or
1 oz Cereal, Dry
1 Egg/Sub
2 slices Toast
2 tsp Margarine
1 Jelly
8 oz Milk
6 oz Beverage

Noon

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable or
6 oz Soup w/Crax
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

Evening

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

One package salt is served with each meal.

Two packages sugar are served with breakfast meal.

One package sugar is served with noon and evening meals.

FOOD LIST:

Food Group

BEVERAGES

Foods Allowed

Caffeine Free or Decaf

Not Allowed

Alcoholic Beverages
caffeinated Beverages

BREADS & CEREALS

Rye, white & wheat bread,
quick breads, crackers,
cooked & ready-to-eat
cereals, breads/cereals
with nuts and seeds as
tolerated

None

DESSERTS

Cakes and cookies, custard,
gelatin plain or with allowed
fruits, plain ice cream and
puddings, sherbets, desserts
with nuts and seeds as
tolerated

Doughnuts

FAT

All (except spicy gravies),
mild salad dressings

Avocado, highly
seasoned gravies and
salad dressings, nuts,
crunchy peanut butter

<u>Food Group</u>	<u>Foods Allowed</u>	<u>Not Allowed</u>
FRUIT & FRUIT JUICES	Bananas, any cooked and canned fruits, all fruit juices and nectars. Other fruits as tolerated	Fresh fruits not tolerated
MEAT GROUP	All except those excluded	Highly seasoned products, deep fried products, sausage, high flavored or spiced cheeses
MILK & MILK PRODUCTS	All	None
POTATOES & POTATO SUBSTITUTES	Noodles, pastas, sweet & white potatoes, white rice	All others not tolerated
SOUP	Broth base & cream soups made from allowed foods	All others not tolerated
SWEETS	Plain sugar or chocolate candy in moderation, honey, jelly, sugar, syrup	All others not tolerated
VEGETABLES & VEGETABLES JUICES	Cooked, fresh, frozen or canned vegetables that are not gas-forming	All others not tolerated
MISCELLANEOUS	Catsup, cinnamon, coconut, mild flavorings, mustard, salt, soy sauce, diluted vinegar, Worcestershire sauce, herbs & spices except those listed to avoid	Chili powder, horseradish, olives, pepper, pickles, pickle relish, seasoned sauces, (except soy and worcestershire), crunch snack foods

REFERENCES FOR BLAND DIET:

2. ARA Healthcare Nutrition Services. *The ARA Nutrition Care Manual*. 11th ed. ARA Services; 1987.
3. Chicago Dietetic Association and South Suburban Dietetic Association. *Manual of Clinical Dietetics*. 2nd ed. American Dietetic Association; 1989.
5. Lewis J. Treatment of gastric ulcer – what is old and what is new. *Archives of Internal Medicine* 143:246, 1983.
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DIETARY MANAGEMENT FOR WEIGHT LOSS

The goal of a weight loss plan is to decrease body fat and reduce the health risks associated with obesity. This goal coincides with the new Dietary Guidelines that state, "Balance the food you eat with physical activity - maintain or improve your weight." Although calorie control is a small but necessary component of a weight loss plan, more emphasis is now being placed on exercise, behavior modification and lifestyle changes.

Location of body fat can be a factor in susceptibility to certain diseases. Abdominal obesity poses a greater health risk than that in the hip or thigh areas, and is linked to high blood pressure, diabetes, cardiovascular disease and certain types of cancer.

Weight reduction can also be beneficial for individuals with arthritis, low back pain or venous insufficiency.

Obesity may exist in varying degrees and may be evaluated in more than one way:

Method 1

Weight above ideal body weight (IBW) for height and sex.

Overweight	110-120% above standard (IBW)
Mild obesity	120-129% of IBW
Moderate obesity	130-149% of IBW
Morbid obesity	>200% of IBW

A practical method of determining obesity is to then use the weight /height criteria or IBW comparison. However, this method does not accurately assess body fat in those who are very muscular or have very large skeletons (see Appendix G).

Method 2

Body Mass Index or BMI (see Appendix G).

Method 3

Offered as an outcome of the 1995 Dietary Guidelines for Americans, uses three weight categories for assessment of weight. The weight categories include the following:

- Healthy Weight
- Moderate Weight
- Severe Overweight

Refer to Appendix B for an explanation of these weight categories.

DIET PRINCIPLES:

- 👍 Any weight loss plan should be designed to minimize relapse.
- 👍 Any weight loss plan should be formulated to be nutritionally adequate, yet promote a gradual weight reduction of one to two pounds per week. A 3500 kcal per week deficit promotes a weight loss of one pound per week.
- 👍 A meal plan for weight loss may contain approximately 15-20% protein, 20-30% fat and 50-60% carbohydrate (emphasizing complex carbohydrates).
- 👍 No foods need to be restricted, as long as an individual feels he/she can exercise portion control.
- 👍 With a physicians approval, an appropriate form of exercise should be prescribed to promote long lasting weight control.

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CALORIE CONTROLLED DIETS

PURPOSE:

These diets are designed to focus on individualized eating and exercise habits. Adequate calories are provided to maintain or attain reasonable weight. Food intake and medications are balanced to maintain near-normal glucose levels and achieve optimal lipid status. Goals also include the prevention and treatment of acute long term complications of diabetes and improvement of health through optimal nutrition.

DIET PRINCIPLES:

- 👍 Calorie levels are prescribed to maintain a reasonable/healthy weight.
- 👍 Protein should contribute 10-20% of calories. In the case of neuropathy, 10% of calories or .8gm/Kg may be considered.
- 👍 Fat intake will vary depending on individual lipid goals.
 - a. Approximately 30% of calories may come from fat;
 - b. Saturated fat:
Less than 10% for individuals with normal lipid levels and reasonable weight status.
Less than 7% for individuals with elevated LDL levels.
- 👍 Dietary cholesterol should be limited to 300mg/day or less.
- 👍 Carbohydrate intake will vary depending on individual lipid and glucose goals.
 - a. Total amount of carbohydrate consumed is a priority over the source of the carbohydrate.
 - b. Approximately 50-60% of calories may come from carbohydrates and sweeteners.
 - c. Sucrose and sucrose containing foods may be substituted for other carbohydrate containing foods. Consider the nutrient value and fat content when making substitutions.
 - d. Fructose sweetened food should be used in moderation due to the possible adverse effects on blood lipids. Foods in which fructose occurs naturally may be consumed.
 - e. Other nutritive sweeteners should be used with caution, incorporated into the meal plan rather than used in addition to the meal plan.
 - f. Non-nutritive sweeteners may be consumed.
- 👍 Approximately 25-35 gm of dietary fiber is recommended daily. Soluble fiber may have a positive effect on lipid and glucose levels.

- 👉 Approximately 2400-3000 mg of sodium per day is recommended. Less than 2400 mg/day is recommended for individuals with mild to moderate hypertension.
- 👉 Alcohol may be used in moderation if the diabetes is well controlled. For insulin dependent diabetics, less than 2 alcoholic beverages can be consumed with or in addition to the usual daily meal plan.
- 👉 The ADA Exchange List, meal plans, may be used as guidelines. Diets and meal plans should be individualized based on eating behaviors, lifestyle factors and treatment goals.

TARGETED NUTRIENT LEVEL:

Kilocalories	PRO gm	CHO gm	FAT gm
1200 Kcal	96	169	30
1500 Kcal	84	214	53
1800 Kcal	97	205	60
2000 Kcal	104	245	68
2200 Kcal	111	281	65
2400 Kcal	119	308	75
2600 Kcal	136	323	80
3000 Kcal	142	388	93

See appendix H and I for information on the calculation of diabetic diet prescriptions and food values for these calculations.

ADEQUACY:

1500 Kcal & above	Usually adequate in all nutrients.
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EXCHANGE LISTS OF FOOD:

The purpose for dividing food into three main groups is that food vary in their carbohydrate, protein, fat and calorie content. Each exchange list contains foods that are similar, and each choice contains about the same amount of carbohydrate, protein, fat and calories. Within the carbohydrate group, starch, fruit, vegetable and milk, choices can be exchanged. The other carbohydrate list may be used for more freedom in meal planning. The foods from this list should be used in moderation as the choices are less nutrient dense and contain more concentrated sugar and fat. Vegetables are included in this group even though they contain only 5 grams of carbohydrate. Three vegetable choices may be used in place of one starch, fruit or milk choice.

The following chart shows the amount of these nutrients in one serving from each exchange list.

<u>Groups/ Exchange List</u>	<u>Carbohydrate (grams)</u>	<u>Protein (grams)</u>	<u>Fat (grams)</u>	<u>Calories</u>
Starch	15	3	1 or less	80
Fruit	15	-	-	60
Milk:				
Skim	12	8	0-3	90
Low-fat	12	8	5	120
Whole	12	8	8	150
Other				
carbohydrates	15	varies	varies	varies
Vegetables	5	2	-	25
Meat and Meat Substitute Group:				
Very lean	-	7	0-1	35
Lean	-	7	3	55
Medium-fat	-	7	5	75
High-fat	-	7	8	100
Fat Group	-	-	5	45

You will notice symbols on some foods in the exchange groups. Foods that are high in dietary fiber (3 grams or more per normal serving) have a (*) symbol. Foods that are high in sodium (400 milligrams or more per normal serving) have a (#) symbol.

STARCH LIST

Each item in this list contains approximately 15 grams of carbohydrate, 3 grams of protein, a trace of fat, and 80 calories. Whole grain products average about 2 grams of fiber per serving, while other foods (*) in this list may be higher in fiber content.

Cereal, grain or pasta	½ cup
Bread products	1 oz
Bran cereals, concentrated*	1/2 cup
Bran cereals, flaked* (such as All-Bran, Bran Buds)	1/2 cup
Bulgur (cooked)	1/2 cup
Cooked cereals	1/2 cup
Cornmeal (dry)	3 tbsp
Grapenuts	3 tbsp
Grits (cooked)	1/2 cup
Oats	1/2 cup
Other ready-to-eat unsweetened cereals	3/4 cup
Pasta (cooked)	1/2 cup
Puffed cereal	1 1/2 cup
Rice, brown or white (cooked)	1/3 cup
Shredded Wheat	1/2 cup
Wheat germ*	3 tbsp

Dried Beans/Lentils/Peas:

(1 Starch plus 1 Very Lean Meat)

Beans and Peas (cooked such as blackeye, garbanzo, kidney, pinto, split, white)*	1/2 cup
Lentils (cooked)*	1/2 cup
Lima beans*	2/3 cup

Starchy Vegetables:

Baked beans*	1/2 cup
Corn*	1/2 cup
Corn on the cob, 6 inches, long*	1
Mixed vegetables*	1 cup
Peas, green (canned or frozen)*	1/2 cup
Plantain*	1/2 cup
Potato, baked	1 small (3oz)
Potato, mashed	1/2 cup
Squash, winter (acorn, butternut)	1 cup
Sweet potato, yams, plain	1/2 cup

Bread:

Bagel	1/2 (1oz)
Bread, reduced calorie	2 slices

STARCH LIST, continued

Bread Stick, crisp, 4 inches long x 1/2 inch	2 (2/3 oz)
English muffin	1/2
Frankfurter or hamburger bun	1/2 (1 oz)
Pita, 6 inches across	1/2
Plain roll, small	1 (1oz)
Raisin, unfrosted	1 slice (1oz)
Rye, pumpernickel*	1 slice (1oz)
Tortilla, 6 inches across (corn or flour)	1
White (including French, Italian)	1 slice (1oz)
Whole wheat	1 slice (1oz)

Crackers/Snacks:

Animal crackers	8
Graham crackers, 2 1/2 in square	3
Matzoth	3/4 oz
Melba toast	5 slices
Oyster crackers	24
Popcorn (popped, no fat added)	3 cups
Pretzels	3/4 oz
Rice Cakes	2
Rye crisp, 2 inches x 3 1/2 inches	4
Saltines-type crackers	6
Snacks Chips (fat free tortilla, potato)	15-20
Whole wheat crackers, no fat added (crisp breads such as Finn, Kavli, Wasa)	2-4 (3/4 oz)

Starchy Foods Prepared with Fat:

(Count as 1 starch exchange plus 1 fat exchange)

Biscuit, 2 1/2 inches across	1
Chow mien noodles	1/2 cup
Corn bread, 2 inch cube	1 (2oz)
Cracker, round butter type	6
Croutons	1 cup
French fried potatoes	16-25 (3oz)
Granola	1/4 cup
Muffin, plain, small	1
Pancake, 4 inches across	2
Popcorn (microwave)	3 cups
Sandwich crackers with filling	3
Stuffing bread (prepared)	1/3 cup
Taco shell, 6 inches across	2
Waffle, 4 1/2 inches square	1
Whole wheat cracker, fat added (such as Triscuits)	4-6 (1 oz)

FRUIT LIST

Each item on this list contains about 15 grams of carbohydrate and 60 calories. Fresh, frozen and dry fruits have about 2 grams of fiber per serving.

The carbohydrate and calorie content for a fruit serving are based on the usual serving of the most commonly eaten fruits. Unless otherwise noted, the serving size for one fruit is:

Fresh fruit or fruit juice	1/2 cup
Dried fruit	1/4 cup
Fresh fruit	1 medium

Fresh, Frozen and Unsweetened Canned Fruit:

Apple (raw, 2 inches across)	1
Applesauce (unsweetened)	1/2 cup
Apricots (canned)	1/2 cup or 4 halves
Apricots (medium, raw)	4
Banana (9 inches long)	1/2
Blackberries (raw)*	3/4 cup
Blueberries (raw)*	3/4 cup
Cantaloupe (5 inches across)	1/3
Cantaloupe (cubes)	1 cup
Cherries (canned)	1/2 cup
Cherries (large raw)	12 each
Figs (raw, 2 inches across)	2 each
Fruit cocktail (canned)	1/2 cup
Grapes (small)	17 each
Grapefruit (medium)	1/2
Grapefruit (segments)	3/4 cup
Honeydew melon (cubes)	1 cup
Honeydew melon (medium)	1/8
Kiwi (large)	1
Mandarin oranges	3/4 cup
Mango (small)	1/2
Nectarine (1 1/2 inches across)*	1
Orange (2 1/2 inches across)	1
Papaya	1 cup
Peach (canned) or	1/2 cup or 2 halves
Peaches (raw) (2 3/4 inches across)	1
Pears (canned)	1/2 cup or 2 halves
Pear (raw)	1/2 large or 1 small
Persimmon (medium, native)	2
Pineapple (canned)	1/2 cup
Pineapple (raw)	3/4 cup
Plum (raw, 2 inches across)	2
Pomegranate *	1/2
Raspberries (raw)*	1 cup

FRUIT LIST, continued

Strawberries (raw, whole)*	1 1/4 cup
Tangerine (2 1/2 inches across)	2
Watermelon (cubes)	1 1/4 cup

Dried Fruit:

Apples*	4 rings
Apricots*	8 halves
Dates	3 medium
Figs*	1 1/2
Prunes*	3 medium
Raisins	2 Tbsp

Fruit Juice:

Apple juice/cider	1/2 cup
Cranberry juice cocktail	1/3 cup
Cranberry juice cocktail, reduced-calorie	1 cup
Fruit juice blends, 100% juice	1/3 cup
Grapefruit juice	1/2 cup
Grape juice	1/3 cup
Orange juice	1/2 cup
Pineapple juice	1/2 cup
Prune juice	1/3 cup

MILK LIST

Each serving of milk or milk products on this list contains about 12 grams of carbohydrate and 8 grams of protein. The amount of fat in milk is measured in percent (%) of butterfat. The calories vary, depending on the kind of milk you choose. The list is divided into three parts based on the amount of fat and calories: skim/very lowfat milk, lowfat milk and whole milk.

One serving (one milk exchange) of each of these provides:

	<u>Carbohydrate</u> <u>gm</u>	<u>Protein</u> <u>gm</u>	<u>Fat</u> <u>gm</u>	<u>Calories</u>
Skim/				
Very Lowfat	12	8	0-3	90
Lowfat	12	8	5	120
Whole	12	8	8	150

Skim and Very Lowfat Milk:

1 % Milk	1 cup
Dry nonfat milk	1/3 cup dry
Evaporated skim milk	1/2 cup

MILK LIST , continued

Lowfat buttermilk	1 cup
Non-fat or low-fat fruit-flavored yogurt sweetened with aspartame or with a non nutritive sweetener	1 cup
Plain nonfat yogurt	3/4 cup
Skim milk	1 cup

Lowfat:

2 % milk	1 cup
Plain lowfat yogurt	3/4 cup

Whole Milk:

Evaporated whole milk	1/2 cup
Whole milk	1 cup

OTHER CARBOHYDRATES LIST

(One exchange equals 15 grams carbohydrate, or 1 starch, or 1 fruit, or 1 milk).

Each item on this list can substitute food choices from starch, fruit or milk lists.
Note these foods do contain added sugars and fats, and should be used in moderation.

<u>Food</u>	<u>Exchanges Per Serving</u>
Angel food cake, unfrosted (1/12 cake)	2 CHO
Brownie, small, unfrosted (2 in. sq.)	1 CHO, 1 Fat
Cake, frosted (2 in. sq.)	2 CHO, 1 Fat
Cake, unfrosted (2 in. sq.)	1 CHO, 1 Fat
Cookie, fat-free (2 small)	1 CHO
Cookie or sandwich cookie with creme filling (2 small)	1 CHO, 1 Fat
Cranberry sauce, jellied (1/2 cup)	2 CHO
Cupcake, frosted (1 small)	2 CHO, 1 Fat
Doughnut, glazed 3 3/4 in. across (2 oz)	2 CHO, 2 Fat
Doughnut, plain cake, 1 medium (1 1/2 oz)	1 1/2 CHO, 2 Fat
Fruit juice bars, frozen, 100% juice 1 bar (3 oz)	1 CHO
Fruit snacks, chewy (pureed fruit concentrate) (1 roll 3/4 oz)	1 CHO
Fruit spreads, 100% fruit (1 Tbsp)	1 CHO
Gelatin, regular (1/2 cup)	1 CHO
Gingersnaps (3 each)	1 CHO
Granola bar (1 bar)	1 CHO, 1 Fat
Granola bar, fat-free (1 bar)	2 CHO
Hummus (chick peas), (1/3 cup)	1 CHO, 1 Fat
Ice cream (1/2 cup)	1 CHO, 2 Fat
Ice cream, fat-free, no sugar added (1/2 cup)	1 CHO
Ice cream, light (1/2 cup)	1 CHO, 1 Fat
Jam or jelly, regular (1 Tbsp)	1 CHO
Milk, chocolate, whole (1 cup)	2 CHO, 1 Fat

OTHER CARBOHYDRATES LIST,continued

Pie, fruit, 2 crust (1/6 pie)	3 CHO, 2 Fat
Pie, pumpkin or custard (1/8 pie)	1 CHO, 2 Fat
Potato chips (1 oz approx 12-18 chips)	1 CHO, 2 Fat
Pudding, regular (made with low-fat milk) (1/2 cup)	2 CHO
Pudding, sugar free (made with low-fat milk) (1/2 cup)	1 CHO
Salad dressing, fat-free (1/4 cup)	1 CHO
Sherbet, sorbet (1/2 cup)	2 CHO
Spaghetti or pasta sauce, canned (1/2cup)	1 CHO, 1 Fat
Sweet roll or Danish (1-2 1/2 oz)	2 1/2 CHO, 2 Fat
Syrup, light (2 Tbsp)	1 CHO
Syrup, regular (1 Tbsp)	1 CHO
Syrup, regular (1/4 cup)	4 CHO
Tortilla chips (6-12 chips, 1oz)	1 CHO, 0-1 Fat
Vanilla Wafers (5 each)	1 CHO, 1 Fat
Yogurt, frozen, fat-free, no sugar added (1/2 cup)	1 CHO
Yogurt, frozen, low-fat, fat-free (1/3 cup)	1 CHO, 0-1 Fat
Yogurt, low-fat with fruit (1 cup)	3 CHO, 0-1 Fat

VEGETABLE LIST

Each vegetable serving on this list contains about 5 grams of carbohydrate, 2 grams of protein, and 25 calories. Vegetables contain 1-4 grams of dietary fiber.

Unless otherwise noted, the serving size for vegetables (one vegetable exchange) is:

Cooked vegetables or vegetable juice	1/2 cup
Raw vegetables	1 cup
Artichoke (1/2 medium)	Mushrooms
Asparagus	Okra
Beans (green, Italian, wax)	Onions
Bean sprouts	Pea pods
Beets	Peppers (all varieties)
Broccoli	Radishes
Brussels sprouts	Salad greens (endive, escarole, lettuce, romaine, spinach)
Carrots	Sauerkraut (#)
Cabbage	Spinach
Cauliflower	Summer squash
Celery	Tomato
Cucumber	Tomato, canned
Eggplant	Tomato sauce
Green onions or Scallions	Tomato/vegetable juice (#)
Greens (collard, mustard, turnip)	Turnips
Kohlrabi	Water chestnuts
Leeks	Zucchini, cooked
Mixed vegetables (without corn, pasta or peas)	

Starchy vegetables such as corn, peas and potatoes are found on the Starch List. For free vegetables, see Free Food List.

MEAT & MEAT SUBSTITUTES LIST

Each serving of meat and substitutes on this list contains about 7 grams of protein. The amount of fat and number of calories varies, depending on what kind of meat or substitute you choose. The list is divided into four parts based on the amount of fat and calories: very lean meat, lean meat, medium-fat meat, and high-fat meat. One ounce (one meat exchange) of each of these provides:

	<u>Protein</u> <u>gm</u>	<u>Carbohydrate</u> <u>gm</u>	<u>Fat</u> <u>gm</u>	<u>Calories</u>
Very Lean	7	0	0-1	35
Lean	7	0	3	55
Medium-Fat	7	0	5	75
High-Fat	7	0	8	100

Very Lean Meat and Substitutes:

(One exchange is equal to any one of the following items).

Poultry:	Chicken ,Cornish hen, turkey	1 oz
Fish:	All fresh and frozen fish (cod, flounder, haddock, halibut, trout), tuna (fresh or canned in water(#)), clams, crab, lobster, scallops, shrimp	1 oz
Wild Game:	Buffalo, duck or pheasant (all without skin), venison (white meat, all without skin)	1 oz
Cheese:	Fat-free cheese	1 oz
	Non-fat, low-fat cottage cheese	1/4 cup
Other:	Dried beans, lentils, peas	
	(cooked, one very lean meat & 1 starch)	1/2 cup
	Egg substitutes, plain	1/4 cup
	Egg whites	2
	Luncheon meats, hot dogs, sausage, chipped beef (#)	
	(< 1 gram fat per oz)	1 oz

Lean Meats and Substitutes:

(One exchange is equal to any one of the following items).

Beef:	USDA Select or Choice grades of lean beef (trimmed of fat) including, flank steak, ground round, roast (chuck, rib, rump), round, sirloin, steak (cubed, porterhouse, T-bone)	1 oz
Pork:	Canadian bacon (#), lean pork such as fresh ham, (boiled, canned, or cured ham (#), tenderloin	1 oz
Lamb:	Chop, leg, roast	1 oz
Veal:	All cuts are lean except for veal cutlets (ground or cubed). Examples of lean veal are chops and roasts	1 oz
Poultry:	Chicken (white meat with skin), Domestic duck (drained of fat, without skin), turkey (dark meat, without skin)	1 oz

Lean Meats and Substitutes, continued

Fish:	Herring (uncreamed or smoked)	1 oz
	Oysters	6 medium
	Salmon (fresh or canned), catfish	1 oz
	Sardines (canned)	2 medium
	Tuna (#) (canned in oil)	1 oz
Wild Game:	Goose (without skin), rabbit	1 oz
Cheese:	Cheese with 3 grams fat or less per oz	1 oz
	4.5% - fat cottage cheese	1/4 cup
	Grated parmesan	2 Tbsp
Other:	Heart (high in cholesterol)	1 oz
	Liver (high in cholesterol)	1 oz
	Luncheon meat, hot dogs (#) with 3 grams fat or less per oz.	1oz

Medium-Fat Meat and Substitutes:

(One exchange is equal to any one of the following items).

Beef:	Most beef products fall into this category. Examples are: corned beef (#), ground beef, meat loaf, Prime grades of meat trimmed of fat, such as prime rib, short-ribs	1 oz
Pork:	Most pork products fall into this category. Examples are: Boston butt, chops, cutlets, loin roast	1 oz
Lamb:	Rib roast, ground	1 oz
Veal:	Cutlet (cubed or ground, unbreaded)	1 oz
Poultry:	Chicken dark meat (with skin), fried chicken (with skin), ground turkey or chicken	1 oz
Fish:	Any fried fish product	1 oz
Cheese:	Feta	1 oz
	Mozzarella	1/4 cup
	Ricotta	2 oz or 1/4 cup
	Skim or part-skim cheeses, such as: cheese with 5 grams fat or less per oz	1 oz
Other:	Egg (high cholesterol, limit to 3/week)	1
	Sausage with 5 grams fat or less per oz	1 oz
	Tofu	4 oz or 1/4 cup

High-Fat Meat and Substitutes:

(One exchange is equal to any one of the following items).

Pork:	Ground pork, pork sausage(#) (patty or link), spareribs	1 oz
Cheese:	All regular cheese (#), such as American, Blue, Cheddar, Monterey Jack, Swiss	1 oz
Other:	Luncheon meat (#) with 8 grams fat or less per oz such as: bologna, pimento loaf, salami	1 oz

High-Fat Meat and Substitutes, continued

Sausage (#), such as: Bratwurst, Italian, Knockwurst, Polish, smoked	1 oz
Hot dog (#) all varieties: beef, chicken, pork or turkey	1 (10/lb)
Bacon (20 slices/lb) (#), Count as one high-fat meat plus one fat exchange	3 slices
Peanut butter (contains unsaturated fat)	2 tbsp

FAT LIST

Each serving on the fat list contains about 5 grams of fat and 45 calories.

The foods on the fat list contain mostly fat, although some items may also contain a small amount of protein. All fats are high in calories and should be carefully measured. The sodium content of these food varies widely. Check label for sodium information.

Fats can be found in three groups, according to the main type of fat they contribute: monosaturated, polyunsaturated and saturated. All fats should be consumed in moderation. Monounsaturated and polyunsaturated fats consumed in small amounts are tied to positive health benefits. Saturated fats have been tied with heart disease and cancer.

Monounsaturated Fats:

One fat exchange equals 5 grams of fat and 45 calories.

Avocado	1/8 medium
Nuts:	
Almonds	6 nuts
Cashews	6 nuts
Mixed nuts	6 nuts
Peanuts	10 nuts
Pecans	2 whole, 4 halves
Oil (canola, olive peanut)	1 tsp
Olives:	
Ripe, black (#)	8 large
Green, stuffed (#)	10 large
Peanut butter (smooth or crunchy)	2 tsp

Polyunsaturated Fats:

One fat exchange equals 5 grams of fat and 45 calories.

Margarine:	
Lower fat (30-50% vegetable oil)	1 tbsp
Stick, squeeze or tub	1 tsp
Mayonnaise:	
Reduced-fat	1 tbsp
Regular	1 tsp

Polyunsaturated Fats, continued

Miracle Whip :	
Reduced-fat	1 tbsp
Regular	2 tsp
Nuts:	
English, Walnuts	4 halves
Oil (corn, safflower, soybean)	1 tsp
Salad dressings:	
Reduced-fat (#)	2 tbsp
Regular (#)	1 tbsp
Seeds: pumpkin, sunflower	1 tbsp

Saturated Fats:

One fat exchange equals 5 grams of fat and 45 calories. Saturated fats can raise blood cholesterol levels.

Bacon, cooked	1 slice
Bacon, grease	1 tsp
Butter:	
Reduced-fat	1 tbsp
Stick	1 tsp
Whipped	2 tsp
Chitterlings, boiled	2 tbsp (1/2 oz)
Coconut, shredded, sweetened	2 tbsp
Cream, half and half	2 tbsp
Cream cheese:	
Reduced-fat	2 tbsp (1 oz)
Regular	1 tbsp (1/2 oz)
Fatback or Salt Pork: **(see below)	
Lard or shortening	1 tsp
Sour cream:	
Reduced-fat	3 tbsp
Regular	2 tbsp

**Use a 1" x 1" x 1/4" piece if you plan to eat the fatback along with the vegetables or beans. Use a 2" x 1" x 1/2" piece when eating only vegetables or beans.

FREE FOODS LIST

A free food is any food or drink that contains less than 20 calories or 5 grams of carbohydrates per serving. You can eat as much as you want of those food items that have no serving size specified. You may eat two to three servings per day of those items that have a specific serving size, and they should be spread throughout the day rather than eaten at one time.

Fat-Free or Reduced Fat Foods:

Creamers, nondairy, liquid	1 tbsp
Creamers, nondairy, powdered	2 tsp
Cream Cheese, fat-free	1 tbsp
Margarine, reduced-fat	1 tsp
Mayonnaise, fat-free	1 tbsp
Mayonnaise, reduced-fat	1 tsp
Miracle Whip, non-fat	1 tbsp
Miracle Whip, reduced-fat	1 tsp
Nonstick cooking spray	
Salad dressing, fat-free	1 tbsp
Salad dressing, fat-free, Italian	2 tbsp

Fat-Free or Reduced Fat Foods, continued:

Salsa	1/4 cup
Sour cream, fat-free, reduced-fat	1 tbsp
Whipped topping, light or regular	2 tbsp

Sugar-free or Low Sugar Foods:

Candy, hard, sugar-free	1 candy
Gelatin, dessert, sugar-free	
Gelatin, unflavored	
Gum, sugar-free	
Jam or jelly, light or low sugar	2 tsp
Pancake syrup, sugar-free	2 tbsp
Sugar substitutes (aspartame, saccharin)	

Drinks:

Bouillon or broth, low sodium	
Bouillon or broth without fat(#)	
Carbonated drinks, sugar-free	
Carbonated or mineral water	
Club soda	
Cocoa powder	1 tbsp
Coffee	
Drink mixes, sugar-free	
Tea	
Tonic water, sugar-free	

Condiments:

Catsup	1 tbsp
Horseradish	
Lemon or Lime juice	
Mustard	
Pickles, dill, unsweetened (#)	1 1/2 large
Soy Sauce, light or regular(#)	
Taco sauce	1 tbsp
Vinegar	

Seasonings:

Seasonings can be very helpful in making food taste better. Be careful of how much sodium you use. Read the label carefully and choose those seasonings that do not contain sodium or salt.

Basil	Hot sauce
Celery seeds	Lemon
Chili powder	Lemon pepper
Chives	Lime
Cinnamon	Mint
Curry	Onion powder
Dill	Oregano
Flavoring extracts (almond, butter, lemon peppermint, vanilla, walnut, etc.)	Paprika
Garlic	Pepper
Garlic powder	Pimento
Herbs	Spices
	Wine, used in cooking (1/4 cup)
	Worcestershire sauce(#)

Note: The above exchanges are from The American Diabetes Association, Inc. and The American Dietetic Association. 1995.

REFERENCES FOR DIABETIC DIETS:

1. American Diabetes Association and American Dietetic Association. *Exchange List For Meal Planning*. Chicago, IL; 1995.
2. American Diabetes Association and American Dietetic Association. Nutrition recommendations and principles for people with diabetes mellitus. *J of Am Diet Assoc*. 1994; 94:504-506.
3. American Diabetes Association. Position statement: nutrition recommendations and principles for people with diabetes mellitus. *Diabetes Care*. 1997; 20: S14-S17.
4. Franz MJ, Horton JM, Bantle JP, Beebe CA, Brunzell JD, Coulston AM, Henry RR, Hoogwerf BJ, Stacpoole PW. Nutrition principles for the management of diabetes and related complications. *Diabetes Care*. 1994; 94:409-590.
5. Schafar RG, Bohannon B, Franz M, Freeman J, Holmes A, McLaughlin S, Haas LB, Kruger DF, Lopenz RA, McMahan MM. Translation of the diabetes nutrition recommendations for health care institutions: Technical Review. *J of Am Diet Assoc*. 1997; 97: 43-51.

SUGGESTED MENU PATTERN:

	<u>1200</u> <u>Kcal</u>	<u>1500</u> <u>Kcal</u>	<u>1800</u> <u>Kcal</u>	<u>2000</u> <u>Kcal</u>	<u>2200</u> <u>Kcal</u>	<u>2400</u> <u>Kcal</u>	<u>2600</u> <u>Kcal</u>	<u>3000</u> <u>Kcal</u>
Breakfast:								
Fruit	1	1	1	1	1	2	2	3
Meat	1	1	1	1	1	1	1	1
Starch	1	2	3	3	3	3	3	3
* Fat	0	.5	1	1	1	1	1	1
Milk	1-skim	1-2%	1-2%	1-2%	1-2%	1-2%	1-2%	1-2%

Noon:

Meat	2	3	3	3	3	3	3	3
Veg	1	1	1	1	1	1	1	1
Veg-raw	*	*	* As desired*			*	*	*
Fruit	1	1	1	2	2	2	2	2
Starch	2	2	2	3	3	3	3	3
* Fat	.5	.5	1	1.5	1.5	1.5	1.5	2
Milk	½-sk	½-2%	½-2%	½-2%	½-2%	1-2%	1-2%	1-2%

Afternoon Nourishment

Starch								2
Fruit								1

Evening:

Meat	2	3	3	3	3	3	3	3
Veg	1	1	1	1	1	1	1	1
Veg-raw	*	*	* As desired *			*	*	*
Fruit	1	1	1	1	1	1	1	2
Starch	1	1	2	2	3	3	3	3
* Fat	.5	.5	1	1	1.5	1.5	1.5	1.5
Milk	½-sk	½-2%	½-2%	½-2%	1-2%	1-2%	1-2%	1-2%

Evening Nourishment

Starch	1	1	1	1	1	1	2	2
* Fat	-	-	-	-	-	-	-	-
Milk	-	-	½-2%	½-2%	½-2%	1-2%	1-2%	1-2%
Fruit	-	-	-	-	1	1	1	1
Meat	-	-	-	-	-	-	2oz	2oz

* - 1 Fat = 2 packages margarine

NO CONCENTRATED SWEETS DIET

(Constant Carbohydrate Meal Plan)

PURPOSE:

This diet is intended for diabetic patients who have maintained their ideal body weight within normal limits for several years. This diet may be used by both insulin dependent and non-insulin dependent diabetics.

DIET PRINCIPLES:

- 👉 The diet follows the meal plan of the hospital Regular Diet. The diabetic food exchange system is not used.
- 👉 Sucrose and sucrose containing foods may be substituted for other carbohydrate containing foods. Consider the nutritive value and fat content when making substitutions.
- 👉 The diet is modified in saturated fat in accordance with the hospital Regular Diet.
- 👉 The calories provided will need to be individualized to promote weight maintenance or as a gradual weight gain as needed.
- 👉 Limit use of foods listed in the use occasionally column to one item per day in a small portion.
- 👉 Guidelines for Management of a Brief (24 hours or less) Illness:
 1. Maintain usual dose of insulin.
 2. Test blood glucose level at least 4 times per day. If above 240 mg\dl, test urine for ketones.
 3. 50 gm carbohydrates should be consumed every 3-4 hours when regular food cannot be consumed.
 4. Replace fluids if fever, vomiting or diarrhea is present. Fluids should be taken every hour.
 5. Watch carefully for signs of ketoacidosis such as ketones in the urine along with a high blood glucose level, severe nausea, vomiting, diarrhea, abdominal pain and rapid breathing.
- 👉 Guidelines for individuals with diabetes who are exercising.
 1. Diabetes should first be under good control.
 2. Location of insulin injection site may need to be adjusted with exercise.
 3. Consider food intake, type and amount of exercise, expected peak times of insulin action and blood glucose levels. Test glucose level

before and after exercise. If unable to test, add an extra fruit or starch for each hour of exercise.

4. Exercise can increase the metabolic rate and therefore increase the number of calories used even at complete rest as this effect extends several hours beyond the actual exercise period.
5. If strenuous exercise is done in the evening, be certain to check blood glucose level at bedtime. If less than 100, eat an extra snack (fruit and starch).
6. Exercise can cause weight gain if muscle tissue is increased.
7. Water lost during exercise must be replaced to prevent dehydration.

INDIVIDUAL ADJUSTMENTS TO MEAL PLAN

CONDITION	ADJUSTMENT
Normal lipid levels Reasonable weights	30% calories from fat <10% of fat as saturated fats
Overweight	Reduce % total fat calories Increase % carbohydrate calories
Malnourished	Increase total calories May increase protein up to an additional 5% Increase carbohydrate/monitor blood sugar May increase % of monosaturated fat
Elevated LDL	<30% of total calories from fat <7% from saturated fat Increase % monosaturated fat to >10% Cholesterol <200 mg/day
Elevated Triglycerides	<10% total fat calories from saturated fat <10% total fat calories from polyunsaturated fat Up to 20% total fat calories as monosaturated fats Carbohydrates moderated to <50% of calories Monitor for weight gain
Insulin Therapy	Include HS snack
Overweight on Oral Antidiabetic Agents	HS snack not necessary

TARGETED NUTRIENT LEVEL:

Kilocalories	2400	Fat	90 gm
Protein	105 gm	Carbohydrate	300 gm

SUGGESTED MENU PATTERN:

Breakfast

1 svg fruit and/or
4 oz Juice
6 oz Cereal, Hot or
1 oz Cereal, Dry
1 Egg/Sub
2 slices Toast
2 tsps Margarine
1 Diet Jelly
8 oz Milk
6 oz Beverage

Noon

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable or
6 oz Soup/Crax
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

Evening

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

One package salt and pepper are served with each meal.

Two packages sugar substitute are served with breakfast meal.

One package sugar substitute is served with noon and evening meals.

FOOD LIST:

Food Group

BEVERAGES

Foods Allowed

Artificially sweetened
carbonated beverages;
coffee; artificially sweetened
and flavored fruit drinks; tea

Use Occasionally

Alcoholic beverages;
all sugar sweetened beverages

BREADS

All

All sugar sweetened products
such as: coffee cake, doughnuts,
sweet rolls.

CEREALS

All

All pre-sweetened flavored,
sugar coated cereals

DESSERTS

Artificially sweetened and
unsweetened gelatin; ice
cream, sherbet

All others including artificial
sweetened candies and cookies;
fat free cookies, cakes, etc.

FATS

All

None

<u>Food Group</u>	<u>Foods Allowed</u>	<u>Use Occasionally</u>
FRUITS AND FRUIT JUICES	All fresh fruits and juices; fruit canned in light syrup, rinsed and drained; unsweetened or artificially sweetened fruits and juices	All canned in heavy syrup all sweetened juices
<u>MEAT GROUP:</u> CHEESE, EGGS, FISH, MEAT, MEAT SUBSTITUTES, POULTRY	All	None
MILK AND MILK PRODUCTS	All	All with added sugar; chocolate milk; cocoa drinks; condensed milk; sweetened fruit flavored yogurt
POTATOES AND POTATO SUBSTITUTES	All	None
SOUPS	All	None
SWEETS	All artificial sweeteners; all artificially sweetened jellies and syrups	All others
VEGETABLES AND VEGETABLE JUICES	All	All with added sugar such as: candied sweet potatoes, glazed carrots
MISCELLANEOUS	Catsup; dill pickles; herbs; mustard; olives; sauces; seasonings; spices; tarter sauce, unsweetened cocoa powder	Sweetened pickles and relishes; sweetened sauces

REFERENCES FOR DIABETIC DIETS:

1. American Diabetes Association and American Dietetic Association. *Exchange List for Meal Planning*. Chicago, IL; 1995.
2. American Diabetes Association. Position statement: Nutrition recommendations and principles for people with diabetes mellitus. *Diabetes Care*. 1997; 20: S14-S17.
3. Franz MJ, Horton JM, Bantle JP, Beebe CA, Brunzell JD, Coulston AM, Henry RR, Hoogwerf BJ, Stacpoole PW. Nutrition principles for the management of diabetes and related complications. *Diabetes Care*. 1994; 94:409-590.
4. Schafar RG, Bohannon B, Franz M, Freeman J, Holmes A, McLaughlin S, Haas LB, Kruger DF, Lopenz RA, McMahan MM. Translation of the diabetes nutrition recommendations for health care institutions: Technical Review. *J Am Diet Assoc*. 1997; 97: 43-51.
5. VA MC Milwaukee, WI, Nutrition & Food Service.

LOW LACTOSE DIET

PURPOSE:

The Low Lactose Diet is designed for use in the diagnosis and treatment of conditions associated with symptomatic lactase deficiency. It is designed to remove all significant sources of lactose from the diet.

DIET PRINCIPLES:

- 👉 The amount of lactose that lactose intolerant individuals can consume varies, and this should be considered when planning their diet.
- 👉 Careful label reading is essential as many prepared foods, medicines and supplements contain milk, milk products or lactose additives and should be limited. Ingredients to limit include milk, lactose, milk solids, whey, curds, skim milk powder, skim milk solids, butter and margarine with milk and milk solids.
- 👉 Hard, aged and processed cheese without non-fat dry milk solids or whey, cultured buttermilk and yogurt may be better tolerated than regular milk because the lactose is partially hydrolyzed. Tolerance of these foods is individual.
- 👉 Consuming lactose with a meal may be better tolerated than by itself.
- 👉 Consuming 5 to 8 grams of lactose at a given time, the amount in 1/2 cup of milk, may be better tolerated than consuming a large amount at one time.
- 👉 Chocolate milk is sometimes tolerated due to its higher sucrose content and slower emptying time from the stomach.
- 👉 Lactase enzyme-treated milk and milk products are often well tolerated.

TARGETED NUTRIENT LEVEL:

Kilocalories	2400	Fat	90 gm
Protein	105 gm	Carbohydrates	300 gm

ADEQUACY:

If lactase enzyme-treated milk and milk products are not tolerated, then this diet is inadequate in calcium. A calcium, vitamin D and riboflavin supplement may be necessary if all dairy products are avoided.

SUGGESTED MENU PATTERN:

Breakfast

1 svg Fruit and/or
4 oz Juice
6 oz Cereal, Hot or
1 oz Cereal, Dry
1 Egg
2 slices Toast
2 tsp Margarine
1 Jelly
8 oz Low Lactose Milk
6 oz Beverage

Noon

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Low Lactose Milk
6 oz Beverage

Evening

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Low Lactose Milk
6 oz Beverage

One package salt and pepper are served with each meal.

Two packages sugar are served with breakfast meal.

One package sugar is served with noon and evening meals.

FOOD LIST:

Food Group

BEVERAGES

Foods Allowed

Carbonated and lactose free
beverages; coffee; decaf; tea

Not Allowed

Any beverages containing
milk or milk products

BREADS

Bagels; French and Italian
breads; hard rolls; pita bread;
saltine and soda crackers and
all other breads as tolerated;
popcorn

Any not tolerated

CEREALS

Cooked and ready-to-eat
cereals prepared without milk
or milk products

Any cereals containing milk
or milk products

Food Group**DESSERTS****Foods Allowed**

Angel food cake; desserts such as cake, cookies and pies prepared without milk or whey; gelatin; Italian ice; water ice; non-dairy whipped topping; pudding made with water or nondairy creamer; tofu based ice cream substitute

Not Allowed

Any desserts prepared with butter or margarine containing milk or whey; commercial mixes; cream pies; custard; ice cream; ice milk; pudding sherbets; sweet rolls; whipped toppings prepared with milk or milk products

FATS

Bacon; milk-free dry cream substitutes (non-dairy creamers); lard; margarine without butter or milk added; oils; peanut butter without fillers; allowed salad dressings; shortening

Butter; cream; cream cheese; dry cream substitutes; margarine; salad dressings that contain milk or milk products; sour cream

FRUIT AND FRUIT JUICES

All fruits and fruit juices

Fruit juices mixed with milk products

MEAT GROUP:**CHEESE**

Aged, hard and processed cheese as tolerated

Cheese food; cheese spread; cottage cheese; mozzarella; ricotta

EGGS

All eggs prepared without milk or milk products

All others; egg substitutes containing milk

FISH

All except those not allowed

All creamed fish

MEAT

Canadian bacon; beef; ham; lamb; liver; other organ meats; pork; all veal except those not allowed

All creamed meats; cold cuts; frankfurters and sausages that contain dry milk solids as fillers

MEAT SUBSTITUTES

Dried beans and peas; kosher meat products; pure or natural peanut butter; tofu products (bean curd)

Peanut butter spreads

POULTRY

All except those not allowed

All creamed poultry

<u>Food Group</u>	<u>Foods Allowed</u>	<u>Not Allowed</u>
MILK AND MILK PRODUCTS	Lactose hydrolyzed milk as tolerated; lactose free non-dairy creamer; soy milk	All other milk and milk products as tolerated
POTATOES AND POTATO SUBSTITUTES	Barley; plain macaroni; noodles; pasta; potatoes; rice; spaghetti	All prepared with bread crumbs; butter; cheese; cream; cream sauce; margarine; milk and milk products as tolerated
SOUPS	Bouillon; broth; clear soups; chicken noodle; chicken rice; consommé; cream soups made with allowed non-dairy creamer; vegetable; all others made with allowed ingredients	Commercially prepared canned creamed, dehydrated and frozen soups; chowders; others containing milk and milk products
SWEETS	Gumdrops; hard candy; honey; jam; jelly; jelly beans; marmalade; marshmallows; molasses; preserves; pure sugar candies; sorghum; sugar; syrup	Sweets containing lactose; dry milk and milk products as tolerated
VEGETABLES AND VEGETABLE JUICES	All plain vegetables and vegetable juices	All creamed vegetables or those prepared with butter, cheese, dry milk and milk products as tolerated
MISCELLANEOUS	All flavorings, seasonings, spices that exclude dry milk solids, milk, and whey; carob powder; corn syrup; pure monosodium glutamate; non-dairy creamer; olives; pickles; popcorn; vinegar	Any prepared with dry milk or milk products; artificial sweeteners containing lactose; white sauce made with milk or milk products

REFERENCES FOR LOW LACTOSE DIET:

1. Aspen Reference Group. *Dietitian's Patient Education Manual*. Vol 1. Gaithersburg, MD. Aspen Publishers, Inc. 1991 (revised 1993).
2. Aurisicchio LN, Pitchumoni CS. Lactose intolerance. Recognizing the link between diet and discomfort. *Postgraduate Medicine*. 1994; 95:113-6, 119-20.
3. Chicago and South Suburban Dietetic Association. *Manual of Clinical Dietetics*. 4th ed. Chicago, IL: American Dietetic Association; 1992.
4. Escott-Stump S. *Nutrition and Diagnosis-Related Care*. 3rd ed. Philadelphia, PA: Lea and Febiger; 1992.
5. Nelson JK, Moxtiess KE, Jensen MD, Gastineau CF. *Mayo Clinic Diet Manual*. 7th ed. St. Louis, MO: Mosby Year Book, Inc., 1994.
6. Pennington JA. *Bowes and Church's Food Values of Portions Commonly Used*. 16th ed. Philadelphia, PA: Lippincott Publishers; 1994.
7. Robinson CH, Weigley ES, Mueller DH. *Basic Nutrition and Diet Therapy*. 7th ed. New York, NY: Macmillan Publishing Co.; 1993.
8. Rodwell-Williams S. *Basic Nutrition and Diet Therapy*. 10th ed. St. Louis, MO: Mosby-Year Book, Inc.; 1995.
9. Zeman F. *Clinical Nutrition and Dietetics*. 2nd ed. New York, NY: Macmillan Publishing Co.; 1991.

PROTEIN RESTRICTED DIET (50 Grams)

PURPOSE:

This diet is designed for patients who must maintain a restricted protein intake to control the complications arising from the accumulation of potentially toxic substances such as ammonia in the blood stream. This diet may be prescribed for individuals with hepatic encephalopathy. Please refer to page 116 for patients with chronic renal failure that require a protein restriction.

This diet is not intended to be used for patients with Parkinson's disease on carbidopa-levodopa (Sinemet). Studies have shown that a redistribution of dietary protein throughout the day may be beneficial to some patients, but this diet needs to be individualized for each patient. If you wish to place a patient on this type of diet, please consult a dietitian.

DIET PRINCIPLES:

- 👉 Protein requirements and restrictions are determined using actual body weight (corrected for edema or ascites) rather than ideal or desired weight. Protein needs of obese individuals are determined based on adjusted ideal body weight.
- 👉 The amount of dietary protein should be individualized according to the need of each patient. The highest amount of protein that will not provoke encephalopathy should be given. Depending on the stage of encephalopathy 0.5-1.0 gram/kg actual body weight (or usual weight if ascites is present) can be used.
- 👉 The diet is designed to provide calories (35-40 calories/kg body weight) to prevent catabolism of body protein. An adequate intake of carbohydrate and fat is required.
- 👉 If edema, ascites or hypertension are present, the sodium content of the diet should be restricted to 2 grams. If lower levels of sodium are necessary, dietary compliance may decrease due to lack of palatability.
- 👉 Fluid restriction may be used to assist with the correction of ascites and edema especially when the serum sodium is less than 130-132 mEq/L.

- ☝ To avoid muscle catabolism, the long-term protein content of the diet should not be less than 50 gm/day. Once the encephalopathy is resolved, the patient's tolerance may be challenged with increases of 10 grams of protein per day until the highest amount tolerated is reached.
- ☝ Patients with hepatic encephalopathy or resolving hepatic encephalopathy may tolerate larger total amount of protein if it comes from dairy, starch, and vegetable sources while limiting meat type sources.

TARGETED NUTRIENT LEVEL:

Kilocalories	2400	Fat	100 gm
Protein	50 gm	Sodium	4.0-4.5 gm
Carbohydrate	310 gm	Potassium	2.8-3.3 gm

ADEQUACY:

Inadequate in most essential nutrients except Vitamin A and Vitamin C. Multivitamin supplements should be considered, however, they must be individually prescribed based on the patient's disease. Iron supplements are contraindicated in patients with severe liver disease. Additional vitamin A supplements should be avoided for those with renal insufficiency.

SUGGESTED MENU PATTERN:

50 Gram Protein Diet With No Other Restrictions

Breakfast

1 svg Fruit and/or
4 oz Juice
6 oz Cereal, Hot or
1 oz Cereal, Dry
1 Egg/Sub
1 slice Toast
1 Jelly
3 tsps Margarine
4 oz Milk
6 oz Beverage

Noon

0 Meat/Egg
4 oz Potato/Sub
2 oz Gravy
4 oz Vegetable or Soup
Salad w/ Drsg
1 slice Bread
1 Jelly
3 tsps Margarine
4 oz Juice
1 svg Fruit/Lo Pro
Dessert
6 oz Beverage

Evening

3 oz Meat
4 oz Potato/Sub
2 oz Gravy
4 oz Vegetable
1 Jelly
3 tsps Margarine
4 oz Juice
1 svg Fruit/Lo Pro
Dessert
6 oz Beverage

One package salt and pepper are served with each meal.
Two packages sugar are served with breakfast meal.
One package sugar is served at noon and evening meals.

20 Gram Protein Diet

The 20 gram protein diet follows the same pattern as the 40 gram diet except that the 2 ounce meat at the evening meal is omitted and no bread is served at the breakfast or noon meal.

40 Gram Protein Diet

The 40 gram protein diet follows the same pattern as the 50 gram diet except that the meat at the evening meal is decreased to 2 ounces and the bread at the noon meal is omitted.

60 Gram Protein Diet

The 60 gram protein diet follows the same pattern as the 50 gram diet except that one ounce meat is added to the noon meal in addition to a second slice of bread at breakfast.

70 Gram Protein Diet

The 70 gram protein diet follows the same pattern as the 60 gram diet except 4 oz milk is served at breakfast and evening meals and two ounces meat is served at noon meal.

80 Gram Protein Diet

The 80 gram protein diet follows the same pattern as the 70 gram diet except that one ounce meat is added to the noon meal and 1 slice of bread at the evening meal.

FOOD LIST:

<u>Food Group</u>	<u>Allowed</u>	<u>Not Allowed</u>
BEVERAGES	Carbonated beverages; coffee; decaf; non-dairy creamers; tea	Alcoholic beverages; cocoa
BREADS	All providing 3 grams protein or less per slice/serving	All others
CEREALS	All cooked or ready-to-eat cereals, except those containing bran or oats	All Bran, oat or high protein cereals
DESSERTS	Special low protein cookies; fruit ice; (ice cream or sherbet in place of 4 oz milk)	All others
FATS	Butter; cooking fats and oils; dry cream substitutes; olives; gravy; margarine; mayonnaise; non-dairy whipped toppings; salad dressing (without cheese, cream, egg or sour cream)	Bacon; cream; nuts; sour cream; other whipped toppings; all others
FRUITS AND FRUIT JUICES	All	None
<u>MEAT GROUP</u>		
CHEESE	All	None
EGGS	All eggs and egg substitutes	None
FISH	All except those not allowed	None
MEAT AND MEAT SUBSTITUTES	Canadian bacon; beef; lamb; liver; pork; veal; tofu firm or extra firm (2 1/2 oz=approx. 1 oz meat)	Dried beans or peas; seeds; those with added vegetable protein seeds; those with added
POULTRY	All	None
MILK AND MILK PRODUCTS	All in limited quantity, 4 oz per day (milk can be increased if meat intake is inadequate)	High protein milk drinks; malted milk; milk shakes
POTATOES AND POTATO SUBSTITUTES	All except those not allowed	All prepared with milk or cheese products; beans; peas

<u>Food Group</u>	<u>Allowed</u>	<u>Not Allowed</u>
SOUPS	Limited to broth or vegetable soup in place of vegetable serving	Soup made with dried beans or peas, poultry, eggs, fish, meat, milk, cheese or cream products
SWEETS	Candy such as gum drops; hard candy; gum drops; jam; jelly; jelly beans; plain sugar candies; honey; marshmallows; preserves; sugar	All others
VEGETABLES AND VEGETABLE JUICES	All; limit peas to 2 oz serving	None
MISCELLANEOUS	Catsup; coconut; herbs and spices; lemon or lemon juice; mustard; pepper; pickles; relishes; salt; barbecue sauce; chili sauce; steak sauce; Worcestershire sauce; vinegar	Meat extracts; other sauces such as cheese, cream, hollandaise, white, or soy sauce

REFERENCES FOR PROTEIN RESTRICTED DIETS:

1. Conn HO. Hepatic Encephalopathy. In: Chiff L, Schiff E. *Diseases of the Liver*. Volume 2. 7th ed. Philadelphia, PA: J.B. Lippincott Co., 1993; 1036-60.
2. Karstaedt PJ, Pincus JH. Protein redistribution diet remains effective in patients with fluctuating parkinsonism. *Archives of Neurology*. 1992; 49(2): 149-51.
3. Mahan K, Arlin M. Nutritional care in disease of the liver biliary system, and exocrine pancreas. In: *Krause's Food, Nutrition and Diet Therapy*. Philadelphia, PA: W.B. Saunders Co.; 1992: 4770474.
4. Muller MJ. Malnutrition in cirrhosis. *Journal of Hepatology*. 1995; 23 (Suppl. 1); 31-5.
5. Munoz SJ. Nutritional therapies in liver disease. *Seminars in Liver Disease*. 1991; 11(4): 278-91.
6. Nelson JK, Moxness KE, Jensen MD, Gastineau CF. *Mayo Clinic Diet Manual*. 7th ed. St. Louis, MO: Mosby Year Book, Inc.; 1994.
7. Pare S, Bar SI, Ross SE. Effect of daytime protein restriction on nutrient intakes of free-living Parkinson's disease patients. *Am J of Clin Nutr*. 1992; 55(3): 701-7.
8. Thomas B. *Manual of Dietetic Practice*. 2nd ed. Cambridge, MA: Blackwell Scientific Publications; 1994.

LOW FAT (40-50 GRAMS) DIET

PURPOSE:

This diet is low in total fat content and is designed to relieve or prevent symptoms of abnormal fat digestion, absorption and/or transportation. Low fat diets may be appropriate therapy for acquired immune deficiency syndrome, blind-loop syndrome, congenital impairments of fat transport and clearance, gallbladder/pancreatic disease, hiatal hernia, inflammatory bowel disease, liver disease, radiation enteritis, short bowel syndrome, steatorrhea, and reflux esophagitis.

DIET PRINCIPLES:

- 👍 Total fat is restricted to 50 grams. Ratio of polyunsaturated, monounsaturated, and saturated fats and cholesterol levels are not specified.
- 👍 Added fats are limited to one serving per meal for a total of three per day (using the portions specified in the ADA diabetic fat exchanges).
- 👍 Lean meats and low fat dairy products.
- 👍 Patients with fat malabsorption should be monitored for possible deficiencies of fat soluble vitamins A, D, E and K and other nutrients including calcium, iron and zinc.
- 👍 In some malabsorptive states, the use of medium chain triglycerides may be appropriate.
- 👍 While the use of fat replacers such as sucrose polyesters (Olestra) are being investigated, their use as part of a low fat diet needs further evaluation. These fat replacers have been reported to cause increased anal leakage and decreased absorption of fat-soluble vitamins.

TARGETED NUTRIENT LEVEL:

Kilocalories	2400	Carbohydrate	375 gm
Protein	90-100 gm	Fat	50 gm

SUGGESTED MENU PATTERN:

Breakfast

1 svg Fruit and/or
4 oz Juice
6 oz Cereal, Hot or
1 oz Cereal, Dry
1 Egg/Sub
2 slices Toast
2 tsps Margarine
1 Jelly
8 oz Skim Milk
6 oz Beverage

Noon

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable or
6 oz Soup/Crax
1 slices Bread
1 tsp Margarine
1 svg Fruit or low Fat
Dessert
8 oz Skim Milk
6 oz Beverage

Evening

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable
1 slice Bread
1 tsp Margarine
1 svg Fruit or Low
Fat Dessert
8 oz Skim Milk
6 oz Beverage

One package salt and pepper are served with each meal.

Two packages sugar are served with breakfast meal.

One package sugar is served with noon and evening meals.

FOOD LIST:

Food Group

Allowed

Not Allowed

BEVERAGES

Carbonated beverages; cocoa prepared with cocoa powder and skim milk; coffee; decaf; tea

Cocoa prepared with all other milk

BREADS

Bagels; bread: French, Italian rye ,wheat, white, whole grain; buns; English muffins; graham and soda crackers; melba toast; plain rolls; corn tortilla; French toast, pancakes, and waffles with less than 3.5 grams of fat per serving

Any of the following with more than 3.5 grams of fat per serving.

Biscuits; cheese or egg bagels; rolls or breads with nuts; coffee cake; cornbread; high fat crackers; doughnuts; French toast; fritters; muffins; pancakes; snack chips; sweet rolls; flour tortilla; waffles

CEREALS

All except those listed to avoid

High fat granola-type cereals; cereal with coconuts; nuts; wheat germ

Food Group**DESSERTS****Allowed**

Angel food or sponge cake; fruit ice; gelatin; gingersnaps; fat free icings; meringue; skim milk puddings; popsicles; skim milk sherbets; vanilla wafers

Not Allowed

All other cakes and cookies; ice cream; pastries; pies; any made with butter, chocolate, coconut, cream, margarine whole milk or nuts

FATS

Fat free margarine or salad dressings; 3 servings per day from the ADA fat exchanges, fat free gravy

Any fat in excess of that allowed; avocado; cream sauces; gravy, nuts; seeds such as pumpkin, sesame or sunflower

FRUITS AND FRUIT JUICES

All

None

MEAT GROUP**CHEESE**

Non-fat cream cheese; creamed cottage cheese (1% milk fat) or dry; low fat or skim milk cheeses; non-fat ricotta

All other cheese

EGGS

All eggs prepared without excessive fat is allowed

None

FISH

All except those listed to avoid

High fat commercial entrees; fish canned in oils or sauces; fried and smoked fish

MEAT

Well trimmed lean cuts of beef, ham, lamb, liver, pork, veal; Canadian bacon; baked, boiled, grilled or roasted cooking techniques should be used; dried beans, peas and lentils

High fat commercial entrees; cured and canned meats; hot dogs; all fatty meats or fried meats; lunch meats; peanut butter; sausages; tofu

POULTRY

Skinless chicken and turkey

High fat commercial entrees; duck; goose; fried, pre-basted and pre-stuffed poultry

<u>Food Group</u>	<u>Allowed</u>	<u>Not Allowed</u>
MILK AND MILK PRODUCTS	Buttermilk; chocolate skim milk; evaporated skim milk; powdered skim milk; skim milk; non-fat yogurt	All other milk and milk drinks; all other yogurt
POTATOES AND POTATO SUBSTITUTES	Noodles; pasta; sweet and white potatoes; rice	Corn chips; chow mein/rice noodles; creamed potatoes; fried potatoes; potato chips stuffing; high fat potato substitutes; creamed or German style potato salad; any prepared with whole milk or cheese
SOUPS	Fat free broth; cream soups made with skim milk; allowed vegetable soups (without added fat)	All canned and commercially prepared broths and soups
SWEETS	Gum drops; hard candy; honey; jam; jelly; jelly beans; marshmallows; molasses; preserves; sugar; sugar substitutes; syrup	All others
VEGETABLES AND VEGETABLE JUICES	All canned, fresh or frozen vegetables and juices	All buttered, creamed and fried vegetables; sautéed high fat vegetables; any prepared with cheese
MISCELLANEOUS	All except those listed to avoid	Buttered popcorn; chocolate; coconut; granola; high fat snack foods; olives

REFERENCES FOR LOW FAT DIET:

1. American Diabetes Association and American Dietetic Association. *Exchange Lists for Meal Planning*; 1995.
2. Cataldo C, Nyenhuis J, Whitney EN. *Nutrition and Diet Therapy Principles and Practice*. 2nd ed. St. Paul, MN: West Publishing Co.; 1989.
3. Giese J. Olestra: properties, regulatory concerns and applications. *Food Technol*. 1996; 50(3): 130-131.
4. Shils M, Olson J, Shike M. *Modern Nutrition in Health and Disease*. 8th ed. Philadelphia, PA: Lea & Febiger; 1994.
5. Thomas B. *Manual of Dietetic Practice*. 2nd ed. Cambridge, MA: Blackwell Scientific Publications, Inc.; 1994.
6. Zeman F, Ney D. *Application of Clinical Nutrition*. Englewood Cliffs, NJ: Prentice Hall; 1991.

LOW CHOLESTEROL DIET

PURPOSE:

This diet is designed to promote the lowering of elevated blood cholesterol levels and therefore play a critical role in the prevention of coronary heart disease (CHD). The dietary principles listed below are based on those of the National Cholesterol Education Program (NCEP) and the American Heart Association (AHA) which provide a two-step approach (Step I and Step II Diets) for the treatment of hypercholesterolemia. Both the Step I and Step II Diets are designed to progressively reduce intakes of saturated fat and cholesterol and to promote weight loss in patients who are overweight. The diet principles listed below are consistent with the AHA Step I diet for the primary prevention of CHD.

PRINCIPLES:

- 👍 Total fat is restricted to less than 30% of calories.
- 👍 Saturated fat is restricted to 8-10% of calories.
- 👍 Polyunsaturated fatty acids comprise 10% of calories.
- 👍 Modified unsaturated fatty acids comprise 10-15% of calories.
- 👍 Cholesterol content is less than 300 mg/day.
- 👍 Egg yolks are limited to three per week.
- 👍 Carbohydrates comprise 50-60% or more of calories with emphasis on complex carbohydrates.
- 👍 Protein intake is 12-15% of calories.
- 👍 Meat is limited to 5-6 oz/day.
- 👍 Total calories are adjusted to maintain or achieve desirable body weight.

TARGETED NUTRIENT LEVEL:

Kilocalories	2400	Cholesterol	less than 300 mg
Protein	100 gm	Carbohydrate	350 gm
Fat	75 gm		

SUGGESTED MENU PATTERN:

Breakfast

2 svg Fruit and/or
4 oz Juice
6 oz Cereal, Hot or
1 oz Cereal, Dry
1 svg Egg/Sub
2 slices Toast
1 tsps Margarine
1 Jelly
8 oz Skim Milk
6 oz Beverage

Noon

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable or
6 oz Soup/Crux
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Skim Milk
6 oz Beverage

Evening

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Skim Milk
6 oz Beverage

One package salt and pepper are served with each meal.

Two packages sugar are served with breakfast meal.

One package sugar is served with the noon and evening meals.

FOOD LIST:

Food Group

BEVERAGES

Allowed

Carbonated beverages; cocoa made with skim milk; coffee; decaffeinated coffee; tea

Not Allowed

Beverages containing chocolate, cream or whole milk

BREADS

Bagels; bread: rye, white and whole wheat; English muffins; graham crackers; hard rolls; matzos; melba toast; oyster crackers; popcorn made with allowed oil or air popped; pretzels; Rye Krisp®; saltine crackers Wasa crisp bread; Zwieback®; French toast, muffins, pancakes, waffles made from allowed ingredients; rice cakes; cholesterol free, low fat breads with less than 3 gm fat per 100 calorie serving

Bagels made with eggs or cheese; butter rolls; cheese breads; egg breads; popovers; commercial biscuits; croissants; doughnuts; French toast; muffins; sweet rolls; and any others prepared with egg yolks, butter, coconut oil, whole milk or cream; butter, cheese, and snack crackers

CEREALS

All except those not allowed

Cereals with coconut and added fats (granolas)

Food Group**DESSERTS****Allowed**

Angel food cake; animal crackers; fig bars; frozen fruit juice bars; fruit ice; gelatin; gingersnaps; ice milk; lowfat frozen yogurt; popsicles; sherbet; sorbet; cake, cookies, custard, pie and pudding if made with egg substitutes, egg whites, and/or margarine, oil or skim milk; cholesterol free, low fat cookies or bakery products with less than 3 gm of fat per 100 calories

Not Allowed

Chocolate; ice cream; commercial cakes, cookies, mixes, pies; any candies or desserts made with solid chocolate, coconut or palm oils, cream, whole or 2% milk

FATS

Corn; cottonseed, olive, peanut, rapeseed (Canola), safflower, sesame, soybean and sunflower oil; creamers made with allowed oils; margarine made from polyunsaturated oil or margarine where the first ingredient listed is liquid oil; no fat or fat free spreads, dressing and sour cream; nuts: almonds, beechnuts, Brazil nuts, chestnuts, peanuts, pine nuts and walnuts; cream cheese; salad dressings made with allowed oils

Bacon; butter; coconut and palm oil; gravies and sauces unless made with allowed ingredients; half and half; hydrogenated margarine; lard; most non-dairy creamers; olives; salad dressings containing sour cream or cheese; salt pork; solid shortening; sour cream; whipped cream

**FRUITS AND
FRUIT JUICES**

All except those not allowed

Coconut; fried fruit or fruit served with butter, chocolate or cream sauce

MEAT GROUP**CHEESE**

Fat-free cheese; low fat cottage cheese (1% or 2% fat); low fat farmers cheese; pot cheese; ricotta cheese or cheese with 5 gm of fat or less per ounce

Cottage cheese (4% fat); natural cheese (American, bleu, brie, cheddar, edam, monterey jack) or any with greater than 5 gm of fat per ounce

EGGS

3 egg yolks per week (including eggs used in cooking); egg substitutes; egg whites

Egg yolk, except as allowed

<u>Food Group</u>	<u>Allowed</u>	<u>Not Allowed</u>
FISH	All except those not allowed	Caviar; fish canned in oil; fried fish
MEAT ENTREES/ MEAT SUBSTITUTES	Dried beans, lentils and peas; lean well trimmed cuts of beef, lamb, pork, veal; lowfat luncheon meats and frankfurters; reduced fat peanut butter; reduced fat tofu	Bologna; corned beef; canned meats; corned beef; fried meats; regular frankfurters and luncheon meats; organ meats; ribs; sausages
POULTRY	All except those not allowed	Duck; goose; skin of all poultry: breaded, fried
MILK AND MILK PRODUCTS	Buttermilk made from skim milk; evaporated skim milk; 1% lowfat milk; nonfat dry milk; skim milk; nonfat or lowfat yogurt	Chocolate milk; cream; condensed milk; evaporated milk; half and half; malted milk; 2% milk; whole milk; whole milk yogurt
POTATOES AND POTATO SUBSTITUTES	Barley; macaroni; cholesterol free noodles; other pasta; rice; spaghetti; sweet potatoes; white potatoes	Egg or chow mein noodles; pork skins; fried potatoes; potato chips; fried rice
SOUPS	Bouillon or broth; home made or commercial soups made with allowed ingredients	Cream soups made with cream, 2% or whole milk
SWEETS	Honey; jam; jelly; marshmallows; molasses; sugar; syrup	All others
VEGETABLES AND VEGETABLE JUICES	All except those not allowed	Vegetables in butter, cream or cheese sauce; fried vegetables
MISCELLANEOUS	Catsup; dill pickles; prepared mustard; relishes; pepper; salt; vinegar	None

REFERENCES FOR LOW CHOLESTEROL DIET:

1. Burke LE. Dietary management of hyperlipidemia. *Journal of Cardiovascular Nursing*. 1991; 5(2): 23-33.
2. Chicago and South Suburban Dietetic Association. *Manual of Clinical Dietetics*. 4th ed. American Dietetic Association; 1992.
3. Davidson MR, Story K. Efficacy of the national cholesterol education program step 1 diet. *Arch Intern Med*. 1996; 156: 305-311.
4. Denke MA. Cholesterol-lowering diets. A review of the evidence. *Arch Intern Med*. 1995; 155: 17-26.
5. Greene JM, Feldman EB. Physician's office guide to a lipid-lowering diet. *Journal of American College of Nutrition*. 1991; 10(5): 443-452.
6. Kramer LM. Implementing new dietary guidelines of the national cholesterol education program. *AACN Clinical Issues*. 1995; 6 (3): 418-431.
7. Kuritzky L. Dyslipidemia: drugs, diet, and common sense. *Hospital Practice*. August 15, 1994.
8. Nelson JK, Moxness KE, Jensen MD, Gastineau CF. *Mayo Clinic Diet Manual*. 7th ed. St. Louis, MO: Mosby Year Book, Inc. 1994.
9. Ornish D., Denke M. Debate: dietary treatment of hyperlipidemia. *Journal of Cardiovascular Risk*. 1994; 1(4): 283-286.
10. Summary of the second report of the national cholesterol education program (NCEP) expert panel on detection, evaluation, and treatment of high blood cholesterol in adults (adult treatment panel II). *JAMA*. 1993; 269(23): 3015-3023
11. Zeman FJ. *Clinical Nutrition and Dietetics*. New York, NY: Macmillan Publishing Company; 1991.

CARDIAC DIET (Low Cholesterol/ Saturated Fat/Sodium and High Fiber)

PURPOSE:

This diet is designed for the management of hyperlipidemia and hypertension. Since soluble fibers have been found to play a role in the reduction of blood lipids, the fiber content of this diet is increased.

DIET PRINCIPLES:

- 👍 The principles of this diet utilize those of the sodium restricted and cholesterol/saturated fat restricted diets.
- 👍 High fiber foods are added if they are appropriate for the sodium and cholesterol restrictions.
- 👍 Cholesterol content does not exceed 300 mg/day, saturated fat content does not exceed 10% of the calories and sodium content does not exceed 2000 milligrams per day.
- 👍 The diet provides an average of 20-30 grams of dietary fiber per day.

TARGET NUTRIENT LEVELS:

Kilocalories	2400	Sodium	2000 mg
Protein	100 gm	Cholesterol	less than 300 mg
Carbohydrate	350 gm	Fiber	30 gm
Fat	75 gm		

SUGGESTED MENU PATTERN:

Breakfast

1 svg Fruit and/or
4 oz Juice
6 oz Cereal, Hot or
1 oz Cereal, Dry
1 Egg/Sub
2 slices Toast
2 tsps Margarine
1 Jelly
8 oz Skim Milk
6 oz Beverage

Noon

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable or
6 oz Soup/Crux
1 slice Whole Grain
Bread
2 tsp Margarine
1 svg Fruit/Dessert
8 oz Skim Milk
6 oz Beverage

Evening

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable
1 slice Whole
Grain Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Skim Milk
6 oz Beverage

Diet Salad Dressing =140 mg Na per serving

One package herb seasoning and pepper are served with each meal.

Two packages sugar are served with breakfast meal.

One package sugar is served with noon and evening meals.

REFERENCES FOR CARDIAC DIET:

1. Burke LE. Dietary management of hyperlipidemia. *Journal of Cardiovascular Nursing*. 1991; 5(2): 23-33.
2. Chicago and South Suburban Dietetic Association. *Manual of Clinical Dietetics*. 4th ed. American Dietetic Association; 1992.
3. Davidson MH, Story K. Efficacy of the national cholesterol education program step 1 diet. *Arch Intern Med*. 1996; 156: 305-11.
4. Denke MA. Cholesterol-lowering diets. A review of evidence. *Arch Intern Med*. 1995; 155: 17-26.
5. Greene JM, Feldman EB. Physician's office guide to a lipid-lowering diet. *Journal of American College of Nutrition*. 1991; 10(5): 443-452.
6. Kramer LM. Implementing new dietary guidelines of the national cholesterol education program. *AACN Clinical Issues*. 1995; 6(3): 418-431.
7. Kuritzky L. Dyslipidemia: drugs, diet, and common sense. *Hospital Practice*. August 15, 1994.
8. Nelson JK, Moxness KE, Jensen MD, Gastineau CF. *Mayo Clinic Diet Manual*. 7th ed. St. Louis, MO; Mosby Year Book, Inc. 1994;
9. Ornish D, Denke M. Debate: dietary treatment of hyperlipidemia. *Journal of Cardiovascular Risk*. 1994; 1(4): 283-6.
10. Summary of the second report of the national cholesterol education program (NCEP) expert panel on detection, evaluation, and treatment of high blood cholesterol in adults (adult treatment panel II). *JAMA*. 1993; 269(23): 3015-23.
11. Zeman FJ. *Clinical Nutrition and Dietetics*. New York, NY; Macmillan Publishing Company; 1991.

POST CARDIAC TRANSPLANT DIET

PURPOSE:

This diet is designed for immunosuppressed cardiac transplant patients, to minimize post operative complications and achieve/maintain an adequate nutrition status. The diet regimen may vary, depending on the patients medical status.

DIET PRINCIPLES:

- 👉 Within 48 hours after surgery, the diet is commonly advanced from clear liquid to full liquid to a regular or therapeutic diet. Nutrition requirements are generally increased at this time. Basal energy expenditures increase 1.5 to 1.75% of normal and protein needs are 1.2-1.5 gm/kg body weight).
- 👉 Two to four weeks after surgery, a 2 gm sodium, cholesterol/saturated fat restricted diet is typically implemented.
- 👉 Once an anabolic state is achieved, the following dietary principles are implemented as needed.
 - a. Calories are adjusted to maintain or achieve desirable body weight.
 - b. Preventive nutrition, in the form of a low cholesterol, low fat diet, is encouraged since graft atherosclerosis is common after a cardiac transplant.
 - c. Concentrated sweets may need to be limited for patients having elevated serum triglycerides or steroid-induced diabetes.
 - d. Sodium is limited to 2 to 4 grams per day due to sodium and fluid retention and/or hypertension.
- 👉 Immunosuppressive therapy can influence a patient's nutrition status after transplantation. Diets may need to be adjusted for the following side effects as well as those previously mentioned.
 - a. Loss of muscle mass
 - b. Fat redistribution
 - c. Increased viral potential
 - d. Malignancy
 - e. Nausea, vomiting
 - f. Osteoporosis
 - g. Gastric irritation

SODIUM CONTROLLED DIETS

PURPOSE:

These diets are intended to reduce dietary sodium intake for patients with blood volume or blood pressure imbalances. Individuals who are hypersensitive to sodium and/or are edematous due to disease states (i.e., renal disease, ascites, congestive heart failure) may benefit from a sodium controlled diet. Sodium sensitivity is highly variable, so treatment should always be individualized.

DIET PRINCIPLES:

- 👍 Sodium intake is limited to the level prescribed.
- 👍 Added salt at the table is prohibited. Seasoning with herbs and spices instead of salt is encouraged.
- 👍 Salt substitutes (potassium chloride) are not routinely used unless prescribed by physicians.
- 👍 Smoked, cured, pickled or highly salted foods are eliminated.
- 👍 Commercial products with high sodium content are limited or omitted.
- 👍 Sodium controlled or reduced foods may have to be used to achieve low intake levels.
- 👍 Although not conclusive, several studies have shown beneficial effects of higher intakes of fiber, calcium, potassium and magnesium on improving blood pressure control.
- 👍 Obese individuals who lose weight may see benefits of decreasing hypertension.

LEVELS OF SODIUM RESTRICTION:

130-174 mEq - No Added Salt	3000 - 4000 mg
87mEq - Mild Sodium Restriction	2000 mg
43 mEq - Strict Sodium Restriction	1000 mg
22 mEq - Very Strict Sodium Restriction	500 mg

REFERENCES FOR SODIUM RESTRICTED DIETS

1. Beckman SL, Ob I, Kjeldsen SE, Eide IK, Westheim AS, Hjermann I. Effect of dietary counseling on blood pressure and arterial plasma catecholamines in primary hypertension. *Am J of Hypertension*. 1995; 8(7): 704- 711.
2. Chicago and South Suburban Dietetic Association. *Manual of Clinical Dietetics*. 4th Ed. American Dietetic Association; 1992.
3. Nelson JK, Moxness KE, Jensen MD, Gastineau CF. *Mayo Clinic Diet Manual*. 7th ed. St. Louis, MO: Mosby Year Book, Inc.; 1994.
4. Overlack A, Ruppert M, Kolloch R, Kraft K, Stumpe KO. Age is a major determinant of the divergent blood pressure responses to varying salt intake in essential hypertension. *Am J of Hypertension*. 1995; 8(8): 829 - 836.
5. Pennington JA. *Bowes and Church's Food Values of Portions Commonly Used*. 16th Ed. Philadelphia, PA: Lippincott Publishers; 1994.
6. Retta TM, Afre GM, Randall OS. Dietary management of blood pressure. *Journal of the Association for Academic Minority Physicians*. 1994; 5(4) 147 - 151.

NO ADDED SALT (3-4 GRAM) SODIUM DIET

DIET PRINCIPLES:

- 👉 A regular diet is served without a salt packet.
- 👉 One cup of commercially prepared soup is allowed daily.
- 👉 Commercially processed entrees are limited depending upon their sodium content.
- 👉 Three cups of milk are served daily.

TARGETED NUTRIENT LEVEL

Kilocalories	2400	Sodium	3-4 gm
Protein	100 gm	Fat	90 gm
Carbohydrate	310 gm		

SUGGESTED MENU PATTERN:

Breakfast

1 svg Fruit and/or
4 oz Juice
6 oz Cereal, Hot, or
1 oz Cereal, Dry
1 Egg/Sub
2 slices Toast
2 tsp Margarine
1 Jelly
8 oz Milk
6 oz Beverage

Noon

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable or
6 oz Soup/Crax
1 slice bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

Evening

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

One package herb seasoning and pepper are served with each meal.
Two packages sugar are served with breakfast meal.
One package sugar is served with noon and evening meals.

2 gram SODIUM DIET

DIET PRINCIPLES:

- 👍 Canned, cured, processed, smoked and other highly salted foods are eliminated.
- 👍 Commercially prepared entrees are restricted unless modified for lower sodium content.
- 👍 Low sodium soups are served.
- 👍 Foods are prepared without added salt.
- 👍 Regular desserts (pies, cakes, cookies, puddings, ice cream) are limited to 1 serving daily.
- 👍 2 servings of milk daily.

TARGETED NUTRIENT LEVEL:

Kilocalories	2400	Sodium	2 gm
Protein	100 gm	Fat	90 gm
Carbohydrate	310 gm		

SUGGESTED MENU PATTERN:

Breakfast

1 svg Fruit and/or
4 oz Juice
6 oz Cereal, Hot or
1 oz Cereal, Dry
1 Egg/Sub
2 slices Toast
2 tsps Margarine
1 Jelly
8 oz Milk
6 oz Beverage

Noon

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable or
6 oz LS Soup/LS Crax
1 slice Bread
1 tsp Margarine
1 svg Fruit/LS Dessert
4 oz Milk
6 oz Beverage

Evening

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable
1 slice Bread
1 tsp Margarine
1 svg Fruit /Regular
Dessert
4 oz Milk
6 oz Beverage

One package herb seasoning and pepper are served with each meal.
Two packages sugar are served with breakfast meal.
One package sugar is served with noon and evening meals.

FOOD LIST:

<u>Food Group</u>	<u>Foods Allowed</u>	<u>Not Allowed</u>
BEVERAGES	All	None
BREADS	Regular breads; cornbread; unsalted crackers; French toast; pancakes dinner rolls; sweet rolls; corn tortillas; waffles; limit flour tortillas to 3 per serving	Biscuits; breads with salt toppings; salted crackers; stuffing mix
CEREALS	All	None
DESSERTS	All low sodium desserts; limit regular desserts to 1 serving daily	None
FATS	All except those not allowed; gravy without added salt	Bacon and bacon fat; regular gravy; salt pork; gravy mixes
FRUIT AND FRUIT JUICES	All	None
<u>MEAT GROUP:</u>		
CHEESE	Cottage; cream; mozzarella; ricotta; swiss; low sodium cheeses	All others
EGGS	All eggs and egg substitutes	None
FISH	Fresh or frozen fish; low sodium canned salmon or tuna	Anchovies; canned, dried, salted or smoked meats; commercial entrees; breaded fish; regular canned salmon or tuna
MEAT	Fresh or frozen beef, lamb, pork or veal; low sodium canned meats	Breaded, canned, cured, processed, salted or smoked meats; chipped beef; cold cuts; commercial entrees; corned beef; ham; hot dogs; sausages

<u>Food Group</u>	<u>Foods Allowed</u>	<u>Not Allowed</u>
POULTRY	Fresh or frozen; low sodium canned entrees	Canned, processed, smoked or breaded poultry; commercial
MEAT SUBSTITUTES	Dried beans and peas; peanut butter; unsalted soybean products; unsalted tofu	Canned beans and peas; sausage substitutes; salted nuts; dry bean mixes
MILK AND MILK PRODUCTS	All except those not allowed; yogurt	Buttermilk; commercial milk shakes; malted milk
POTATOES AND POTATO SUBSTITUTES	Noodles; pasta; dehydrated fresh, frozen and plain potatoes; unsalted potato chips; rice	Canned, frozen and dehydrated commercial combination dishes; potato chips; shoestring potatoes and similar salted products; pasta and rice mixes
SOUPS	Low sodium bouillon and broth; unsalted soup prepared with allowed foods	Bouillon; broth; con- sommages; commercial frozen, canned and dehydrated soups
SWEETS	Honey; jam; jelly; sugar	None
VEGETABLES AND VEGETABLE JUICES	Fresh, frozen or no- added salt, canned except those not allowed; unsalted tomato paste, puree; low sodium vegetable juice	Sauerkraut; regular tomato sauce; pickled vegetables; regular canned vegetables and vegetable juices; vegetables prepared with brine, bacon, ham or salt pork
MISCELLANEOUS	Catsup (limit to 1 tbsp/day); celery seed; fresh horse- radish; mustard (limit to 1 tsp/day); tabasco sauce; unsalted snack foods; all others except those not allowed	All convenience foods; capers; prepared horse- radish; meat tenderizer; monosodium glutamate; olives; pickles; relish; salt and salt containing seasonings, i.e., celery salt, garlic salt, sea salt, etc.; salted snack foods; BBQ, soy, steak, teriyaki, Worcestershire sauces

1 GRAM SODIUM DIET

DIET PRINCIPLES:

- 👍 Canned, cured, processed, smoked or other highly salted foods are eliminated.
- 👍 Foods are prepared without salt.
- 👍 Milk is limited to 2 cups daily.
- 👍 Unsalted meat products are limited to 6 ounces per day and 1 egg per day.
- 👍 Commercially prepared frozen entrees are eliminated unless modified to lower sodium content.
- 👍 Carbonated beverage consumption should not exceed 16 ounces daily.
- 👍 Desserts are limited to low sodium varieties.
- 👍 Low sodium bread and margarine are served.
- 👍 Hidden sources of sodium, i.e. medications, water supply should be monitored.

TARGETED NUTRIENT LEVEL:

Kilocalories	2400	Sodium	1 gm
Protein	100 gm	Fat	90 gm
Carbohydrate	300 gm		

SUGGESTED MENU PATTERN:

Breakfast

1 svg Fruit and/or
4 oz Juice
6 oz LS Cereal, Hot, or
1 oz LS Cereal, Dry
1 LS Egg/Sub
2 slices LS Bread
2 tsps LS Margarine
1 Jelly
8 oz Milk
6 oz Beverage

Noon

3 oz LS Meat/Sub
4 oz LS Potato/Sub
4 oz LS Vegetable or
6 oz LS Soup/LS Crax
1 slice LS Bread
1 tsp LS Margarine
1 svg Fruit/LS Dessert
1 creamer
4 oz Milk
6 oz Beverage

Evening

3 oz LS Meat/Sub
4 oz LS Potato/Sub
4 oz LS Vegetable
1 slice LS Bread
1 tsp LS Margarine
1 svg Fruit/
LS Dessert
4 oz Milk
6 oz Beverage

One package herb seasoning and pepper are served with each meal.

Two packages sugar are served with breakfast meal.

One package sugar is served with noon and evening meals.

FOOD LIST:

Food Group

BEVERAGES

Foods Allowed

Coffee; decaf; tea; limit
carbonated beverages
to 16 oz /day

Not Allowed

Instant cocoa; softened
water and beverages
made from softened
water

BREADS

Low sodium: bread, cornbread,
crackers, French breads,
waffles, pancakes, rolls

All made with regular
baking powder, baking
soda, salt, self rising flour;
frozen waffles or pancakes

CEREALS

Cooked cereals prepared
without salt; limit ready-to-eat
cereals to those with less than
100 mg sodium/serving

Instant hot cereals; hot
cereals with sodium
added; all ready-to-eat
cereals with sodium
content greater than
100 mg.

DESSERTS

Fruit ice; low sodium: cakes,
cookies, pies; regular gelatin
and sherbet (limit to 1/2 cup/
day) custard, ice cream and
pudding made with milk
allowance and allowed
ingredients

All others; no instant
puddings made from
mixes

<u>Food Group</u>	<u>Foods Allowed</u>	<u>Not Allowed</u>
FATS	Unsalted or sweet butter or margarine; cooking fats and oils; unsalted gravy; mayonnaise and salad dressings prepared without salt or sodium compounds; sour cream	Bacon and bacon fat; salted butter and margarine; commercial gravy mixes; salted gravy; mayonnaise and salad dressings prepared with salt or sodium compounds; salt pork
FRUIT AND FRUIT JUICES	All except those not allowed	Fruits processed with salt or sodium containing compounds
<u>Meat Group:</u> CHEESE	Low sodium cheese; unsalted cottage cheese; ricotta	All others
EGGS	All unsalted; egg substitutes (limit eggs to one per day)	All others
FISH	Unsalted fresh or frozen; low sodium canned salmon or tuna	Anchovies; breaded, canned, dried, salted, or smoked; commercial entrees
MEAT	Unsalted fresh or frozen beef, lamb, pork or veal; low sodium canned	Canned, cured, salted, breaded, processed or smoked meats; cold cuts; commercial entrees; hot dogs; sausages
POULTRY	Unsalted fresh or frozen poultry; low sodium canned	Breaded, canned, processed, smoked or commercial entrees
MEAT SUBSTITUTES	Dried beans; unsalted nuts; unsalted peanut butter; dried peas; unsalted soybeans and tofu	Canned beans and peas; salted nuts; regular peanut butter; breakfast sausage and bacon or sausage substitutes
MILK AND MILK PRODUCTS	All except those not allowed (limit to 2 cups daily); cream and cream substitutes	Buttermilk; chocolate milk; condensed milk; commercial milkshakes; malted milk

<u>Food Group</u>	<u>Foods Allowed</u>	<u>Not Allowed</u>
POTATOES AND POTATO SUBSTITUTES	Unsalted or low sodium products: barley, noodles, pasta, potatoes, potato chips, rice	Dehydrated potatoes; potato chips; shoestring potatoes and similar salted products; potatoes canned with salt and sodium products; canned, frozen, and dehydrated commercial combination dishes
SOUPS	Low sodium: bouillon, broth in moderation; strained consommé; broth-based soups made without salt and with allowed vegetables; low sodium cream soups made with milk allowance	All others; broth; bouillon; commercially prepared canned and dehydrated soups
SWEETS	Candy prepared without salt or sodium compounds; gum drops; hard candy; honey; jams and jelly; jelly beans; marmalade; marshmallows; molasses; semi-sweet and baking chocolate; sugar; syrup	All other candy; chocolate syrup
VEGETABLE AND VEGETABLE JUICES	Unsalted fresh or frozen; no added salt canned; no added salt vegetable juices	Canned or frozen vegetables with salt; regular vegetable juices; pickled vegetables; frozen vegetables in sauces; vegetables seasoned with bacon, ham or salt pork; sauerkraut; tomato products with added salt
MISCELLANEOUS	Low sodium catsup; fresh garlic; garlic powder; herbs; fresh horseradish; mustard and sauces prepared without salt or sodium compounds; lemon and lime juice; fresh onions or onion powder; pepper; spices; unsalted snack foods; tabasco sauce; vinegar	Capers; catsup; prepared horseradish, mustard and sauces prepared with salt or sodium compounds; meat tenderizer; BBQ; soy; monosodium glutamate; olives; pickle and pickle relish; salt; celery, garlic or onion salt; seasoning salts; salted snack foods; steak; teriyak; Worcestershire

500 mg SODIUM DIET

DIET PRINCIPLES:

- 👍 All foods are prepared without salt.
- 👍 Processed, canned, cured and other highly salted foods are eliminated.
- 👍 Limit unsalted meat to 5 ounces per day and 1 egg per day.
- 👍 This diet requires the use of unsalted margarine, breads and cereals.
- 👍 Milk is limited to 2 cups per day.
- 👍 Vegetables, naturally high in sodium, are limited.
- 👍 Salt substitute (potassium chloride) can be provided with physician approval.

TARGETED NUTRIENT LEVEL:

Kilocalories	2400	Sodium	500 mg
Protein	90 gm	Fat	85 gm
Carbohydrate	310 gm	Potassium	3800 mg

ADEQUACY:

This diet may be low in iodine.

SUGGESTED MENU PATTERN:

Breakfast

1 svg Fruit and/or
4 oz Juice
6 oz LS Cereal, Hot, or
1 oz LS Cereal, Dry
1 Egg
2 slices LS Toast
2 tsp LS Margarine
1 Jelly
8 oz Milk
6 oz Beverage

Noon

2 oz LS Meat/Sub
4 oz LS Potato/Sub
4 oz LS Vegetable
2 oz LS Salad with
LS Salad Dressing
1 slice LS Bread
1 tsp LS Margarine
1 svg Fruit/LS Dessert
1 creamer
6 oz Beverage

Evening

3 oz LS Meat/Sub
4 oz LS Potato/Sub
4 oz LS Vegetable
1 slice LS Bread
1 tsp LS Margarine
1 svg Fruit or
LS Dessert
8 oz Milk
6 oz Beverage

One package herb seasoning and pepper are served with each meal.

Two packages sugar are served with breakfast meal.

One package sugar is served with noon and evening meals.

FOOD LIST:

Food Group

BEVERAGES

Foods Allowed

Cocoa prepared from milk allowance; coffee; low sodium carbonated beverages; tea

Not Allowed

Alcoholic beverages; other carbonated beverages; instant cocoa

BREADS

Low sodium biscuits; bread; cornbread; unsalted crackers; French toast; muffins; pancakes; rolls; sweet rolls and waffles

All made with regular baking powder, baking soda, salt, or self-rising flour; frozen waffles

CEREALS

Cooked cereals prepared without salt; puffed rice; puffed wheat; shredded wheat; low sodium ready-to-eat cereals

Quick cooking cereals with sodium added; all other ready-to-eat cereals

DESSERTS

Low sodium: baked goods, cookies, and pies, prepared without salt or sodium compounds; fruit ice; low sodium gelatin; pudding made with milk allowance and allowed ingredients

Regular baked products made with salt; All others

Food Group**Foods Allowed****Not Allowed**

FATS

Sweet or unsalted butter and margarine; cream and cream substitutes; cooking fats and oils; unsalted gravy; mayonnaise and salad dressings prepared without salt or sodium compounds; unsalted nuts; unsalted peanut butter; sour cream

Bacon, bacon fat; salted butter and margarine; commercial gravy mixes; salted gravy; mayonnaise and salad dressings made with salt or sodium compounds; salted nuts; salted peanut butter; salt pork

FRUIT AND FRUIT
JUICES

All

None

Meat Group:

CHEESE

Low sodium; unsalted cottage cheese; ricotta and cream cheese

All others

EGGS
(limit to 1 per day)

All unsalted

Egg Substitutes

FISH

Unsalted fresh or frozen; low sodium canned

Anchovies; canned, dried, salted, or smoked; commercial entrees

MEAT

Unsalted fresh, frozen; low sodium canned

Canned, salted or smoked; commercial entrees

MEAT SUBSTITUTES

Dried peas and beans; Low sodium peanut butter; Unsalted soybeans

Bacon; ham and sausage substitutes; regular peanut butter

POULTRY

Unsalted fresh, frozen; low sodium canned

Canned or smoked; commercial entree

MILK AND MILK
PRODUCTS
(2 cups per day)

Regular milk in allowed amount; low sodium milk as desired

Buttermilk; chocolate milk; commercial milk shakes; condensed milk; malted milk

<u>Food Group</u>	<u>Foods Allowed</u>	<u>Not Allowed</u>
POTATOES AND POTATO SUBSTITUTES	Unsalted or low sodium products: barley, noodles, pasta, potatoes, potato chips, rice; spaghetti	Dehydrated potatoes; potato chips; shoestring potatoes and similar salted products; potatoes canned with salt and sodium products; canned, frozen, and dehydrated processed combination dishes
SOUPS	Low sodium: bouillon, broth consommé and broth-based soup; low sodium cream soup made with milk allowance	All others
SWEETS	Candy prepared without salt or sodium compounds; gum drops; hard candy; honey; jam; jelly; jelly beans; marmalade; marshmallows; molasses; preserves; sugar; syrup; semi-sweet and baking chocolate	All other candy; chocolate syrup
VEGETABLE AND VEGETABLE JUICES	Unsalted fresh or frozen except those allowed; low sodium canned vegetable juices; limit the following vegetables to one serving per day; beets, carrots, celery, greens or spinach	Frozen lima beans and peas; sauerkraut; mustard greens; vegetables prepared in brine; all others
MISCELLANEOUS	Low sodium catsup; horseradish and mustard; sauces prepared without salt or sodium compounds; celery seed; fresh garlic and garlic powder; herbs and spices; onion powder; unsalted snack foods	All convenience foods; catsup, horseradish, mustard and sauces prepared with salt or sodium compounds; monosodium glutamate; olives; pickles; pickle relish; salt; celery, garlic, and onion salt; salted snack foods; seasoning salts; soy sauce; Worcestershire sauce

REFERENCES FOR 500 MG SODIUM RESTRICTED DIET:

1. American Dietetic Association. *Handbook of Clinical Dietetics*. London; Yale University Press; 1981
2. Burtis G. *Applied Nutrition and Diet Therapy*. Philadelphia, PA: W.B. Saunders and Company; 1988.
3. Hypertension Prevention Trial Research Group: The hypertension prevention trial: three-year effects of dietary changes on blood pressure. *Arch Intern Med*. 150: 153, 1990.
4. Chicago Dietetics Association and South Suburban Dietetic Association. *Manual of Clinical Dietetics*. 2nd ed. American Dietetics Association; 1989.
5. Jeejeebhoy K. *Current Therapy in Nutrition*. Philadelphia PA: B.C. Decker, Inc. 228-244; 1988.
6. McGregor GA, et. Al. Double-blind study of three sodium intakes and long-term effects of sodium restriction in essential hypertension. *Lancet* 2(8674); 1244, 1989.
7. Rodwell-Williams S. *Nutrition and Diet Therapy*. St. Louis, MO: Mosby Yearbook Publishing Co.; 1989.
8. Shils M and Young V. *Modern Nutrition in Health and Disease*. Philadelphia, PA: Lea and Febiger; 1988.
9. Zeman FJ. *Clinical Nutrition. And Dietetics*. New York, NY: MacMillan Publishing Co.; 1991.

LOW POTASSIUM DIET (2000 mg)

PURPOSE:

This diet is designed for patients who have an elevated serum potassium level. This hyperkalemic condition may occur in renal disease, particularly during interdialytic periods, also in hypoaldosteronism, adrenal insufficiency and severe acidosis. The potassium is restricted in the diet based on the patient's serum and urine levels.

DIET PRINCIPLES:

- 👉 The usual American diet contains 3000 milligrams (mg) to 5000 mg (77-128 milliequivalents-mEq) of potassium per day; our regular hospital diet provides 2800-4000 mg (71-102 mEq) potassium per day.
- 👉 The potassium controlled diet limits and controls portions of foods which are naturally high in potassium including some fruits and vegetables, potatoes, dairy products, bran cereals, coffee and meats.
- 👉 Some manufactured low sodium foods use potassium to replace the sodium; therefore, products like salt substitute and sodium free baking powder are avoided.
- 👉 To reduce potassium content: cook fresh and frozen vegetables in large amounts of water and drain before serving. Discard all liquid from canned fruit and vegetables.
- 👉 See renal food choice lists for potassium values for specific foods.

TARGETED NUTRIENT LEVEL:

Kilocalories	2400	Fat	90 gm
Protein	90 gm	Potassium	2300 mg (60 mEq)
Carbohydrate	320 gm		

ADEQUACY:

This diet may be inadequate in calcium, Vitamin A, B-complex vitamins, ascorbic acid and iron. Supplementation of these nutrients may be necessary.

SUGGESTED MENU PATTERN:

Breakfast

1 svg Fruit and/or
4 oz Juice
6 oz Cereal, Hot or
1 oz Cereal, Dry
1 Egg/Sub
2 slices Toast
2 tsp Margarine
1 Jelly
4 oz Milk
6 oz Beverage

Noon

2 oz Meat/Sub
4 oz Potato Sub
2 oz Gravy
4 oz Vegetable
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
1 Creamer
6 oz Tea

Evening

3 oz Meat/Sub
4 oz Potato/Sub
2 oz Gravy
4 oz Vegetable
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
4 oz Milk
6 oz Tea

One package salt and pepper are served with each meal.

Two packages sugar are served with breakfast meal.

One package sugar is served with noon and evening meals.

FOOD LIST:

Food Group

BEVERAGES

Allowed

Carbonated beverages; coffee or decaffeinated coffee (limit 8 oz per day); tea (limit 16 oz per day)

Not Allowed

Alcoholic beverages; chocolate; cocoa

BREADS

French, Italian, white; plain buns; doughnuts; pancakes; rolls; waffles

Pumpernickel; rye; whole wheat; any containing nuts, seeds or dry fruit; bran muffins

CEREALS

Cream of Wheat® or Rice®; farina; flaked cereals; hominy grits; Puffed Rice® or Wheat®, any containing less than 120 mg K per serving

Bran or whole grain cereals; granola, oatmeal, Shredded Wheat®

Food Group**DESSERTS****Foods Allowed**

Plain cake; cookies such as butter, shortbread, sugar, vanilla sandwich; fruit ice; gelatin; sherbet; sweet rolls without nuts; fruit pie if made from allowed fruits

Not Allowed

Desserts containing one or more of the following: chocolate, coconut, cream of tartar; dairy products, dried fruits, ice cream, ice milk, molasses, nuts, oatmeal, peanut butter, pudding, yogurt

FATS

Bacon; butter; margarine; mayonnaise; oil; mayonnaise type salad dressing; other salad dressings with less than 20 mg K per serving

Any containing potassium chloride; avocado; nuts; peanut butter

**FRUITS AND
FRUIT JUICES
(1/2 cup svg
size or 1 small
fresh)****Canned:**

Applesauce, apricots, blackberries, blueberries, boysenberries, cherries, cranberry sauce, fruit cocktail, grapes, grapefruit segments, mandarin oranges, peaches, pears, pineapple, plums

Fresh:

Apples, blackberries, blueberries, cherries, grapes, grapefruit (1/2 small), lemon, lime, peach, pineapple, plum, raspberries, raisins(2 tbsps), strawberries, tangerine, watermelon

Apricots (fresh & dried); bananas, cantaloupe, honeydew, kiwi, oranges, dates, fresh pear, prunes, nectarines

See Renal Choice
Lists for K content
per serving

Juices/Drinks:

Apple, artificially flavored fruit drinks, cranberry, fruit punch, grape, lemonade, nectars

All other fruit juices such as orange or prune juice

MEAT GROUP:**CHEESE**

Limit to 6 oz/day

All except those listed to avoid

Any containing nuts or seeds; cheese sauces

EGGS

Plain egg and cholesterol free substitute

Egg products containing cheese or vegetables

FISH

All

None

<u>Food Group</u>	<u>Allowed</u>	<u>Not Allowed</u>
MEAT	Beef; lamb; liver; pork; veal	Any with added meat extenders
MEAT SUBSTITUTES	Tofu	Soy products; dried peas or beans
POULTRY	All	Any with added meat extenders
MILK AND MILK PRODUCTS	All limited to 8 oz per day	Chocolate milk; any other drinks containing milk or dairy products in excess of allowed amounts
POTATOES AND POTATO SUBSTITUTES	Noodles; pasta; boiled or mashed sweet or white potatoes; white rice; (limit potatoes to 1 small or ½ cup per day)	Baked potato; French fries; potato chips; brown rice; wild rice; any in cream, cheese or tomato sauce
SOUPS	None	All
SWEETS	Gum drops; hard candy; honey; jam; jelly beans; lemon drops; lollipops; sugar; syrup; corn or maple	Caramels; chocolate; molasses; natural licorice, other candies
VEGETABLES AND VEGETABLE JUICES	Asparagus; beans: green & wax; canned beets; broccoli, carrots; corn; cucumber; lettuce; mustard greens; onion; pepper; radishes; canned or fresh mushrooms; peas; raw spinach; summer squash; turnip greens; watercress	Boiled mushrooms; cooked spinach; dried beans or peas; tomato products: fresh, pastes, puree and sauce; winter squash; all other vegetable juices and vegetables not listed as allowed; any in cream, cheese or tomato sauce
MISCELLANEOUS	Regular baking powder and soda; dry cream substitute; flavorings; herbs; lemon juice; mustard; pickles; salt; spices; tortilla chips; vinegar	Salt-free baking powder, salt substitute, lite salt; low sodium; bouillon; pretzels; sauces such as: barbecue, catsup, chili, soy, steak

REFERENCES FOR LOW POTASSIUM DIET:

1. American Dietetic Association. *Manual of Clinical Dietetics*. 4th ed. Chicago, IL: The American Dietetic Association; 1992.
2. Aspen Reference Group. *Dietitians Patient Education Manual*. Gathersburg, MD: Aspen Publishers, Inc.; Supplement 1(8): 22.1-22.8, 1992.
3. Kurtzman N, Gonzalez J, DeFronzo R, Giebisch G. A patient with hyperkalemia and metabolic acidosis. *Am J Kidney Disease*; 15(4): 333-56, 1990.
4. Nelson JK, Moxness KE, Jensen MD, Gastineau CF. *Mayo Clinic Diet Manual*. 7th ed. St. Louis, MO: Mosby Year Book, Inc.; 1994.
5. Pennington JA. *Bowes and Church's Food Value of Portions Commonly Used*. 16th ed. Philadelphia, PA: Lippincott Publishers; 1994.
6. Renal Dietetic Practice Group of the American Dietetic Association. *National Renal Diet: Professional Guide*. Chicago, IL: 1993.
7. Shils ME, Olson JA, Shike M. *Modern Nutrition in Health and Disease*. 8th ed. Philadelphia, PA: Lea & Febiger; 1994.

LOW CALCIUM DIET

PURPOSE:

This diet is prescribed for patients with hypercalcemia or hypercalciuria. These conditions may be caused by hypervitaminosis D, inoperable hyperparathyroidism, or idiopathic hypercalciuria. Those with absorptive hypercalciuria, diet dependent (type II), in which urinary calcium is elevated only with high dietary calcium intake should follow a calcium controlled diet. The calcium restriction can be adjusted according to each patient's condition, however is usually not less than the recommended daily intake level.

DIET PRINCIPLES:

- 👍 Recommended intake for calcium is 800 mg/dl for males; 1,000 mg/dl for pre-menopausal females; and 1,200 mg/dl for post-menopausal females.
- 👍 Literature indicates less than the recommended intake yields no additional clinical benefit and may result in negative calcium balance, therefore this diet limits calcium to recommended daily levels.
- 👍 Literature suggests sufficient control of calcium can usually be achieved by limiting milk and foods made with large amounts of milk.
- 👍 A low calcium diet may increase oxalate absorption from the diet, therefore: lowering oxalate intake is recommended in addition to controlling dietary calcium.
- 👍 Primary therapy in the management of kidney stone formation is adequate fluid intake. Recommended fluid intake is 2.5-3.0 liters/day, unless volume sensitive.
- 👍 A "No Added Salt" may also be used with a calcium controlled diet prescription. Individuals presenting with hypercalciuria excrete less calcium in the urine on a lower sodium diet.
- 👍 Calcium is not routinely restricted for spinal cord injury or immobilized patients. Lack of weight bearing leads to calcium loss from bone, consequently promoting hypercalciuria. Adequate calcium intake is advised rather than restricted in order to avoid negative calcium balance and osteoporosis.
- 👍 The diet order should indicate the specified level of calcium desired. Consult the dietitian for additional recommendations.

- ☝ If hypertriglyceridemia is also a problem, targeted caloric levels can be reduced to promote greater weight loss and lower triglyceride levels. Alcohol and concentrated sweets would be limited.

TARGETED NUTRIENT LEVEL:

Kilocalories	2400	Fat	90 gm
Protein	105 gm	Carbohydrates	300 gm
Calcium	800 mg		

SUGGESTED MENU PATTERN:

The dietitian will adjust to meet individual needs.

REFERENCES FOR LOW CALCIUM DIET:

1. Coe F, Parks J, Asplin Jr. The pathogenesis and treatment of kidney stones (Review Article). *N Eng J Med*. 1992; 327 (16):1141-1151.
2. Curhan G, Willett W, Rimm E, Stampfer M. A prospective study of dietary calcium and other nutrients and the risk of symptomatic kidney stones. *N Eng J Med*. 1993; 328:833-838.
3. Hall P. Calcium stones: calcium restriction not warranted. *Cleveland Clinic J Med*. 1995; 6:71-72.
4. Nelson JK, Moxness KE, Jensen MD, Gastineau CF. *Mayo Clinic Diet Manual*. 7th ed. St. Louis, MO: Mosby Year Book, Inc.; 1994.
5. Pennington JA. *Bowes and Church's Food Value of Portions Commonly Used*. 16th ed. Philadelphia, PA: Lippincott Publishers; 1994.

LOW OXALATE DIET

PURPOSE:

This diet is designed for use in the treatment of calcium oxalate nephrolithiasis and hyperoxaluria secondary to ileal disease or intestinal resection/bypass.

DIET PRINCIPLES:

- 👉 Not all patients benefit from dietary oxalate restriction. After a trial on an oxalate controlled diet, determination of urinary oxalate excretion should be assessed before diet therapy is continued.
- 👉 Foods that have been shown to produce significant increases in urinary oxalate excretion include spinach, rhubarb, beets, nuts, chocolate, tea, wheat bran and strawberries.
- 👉 Calcium restriction should not be below the Reference Daily Intake to prevent negative calcium balance, bone mineral loss, and increased intestinal absorption of oxalate.
- 👉 In hyperoxaluria secondary to ileal disease, malabsorption, or GI surgery, calcium restriction is not indicated.
- 👉 Limit ascorbic acid supplements to one gram per day in those patients who need supplementation since this is broken down to oxalic acid.

TARGETED NUTRIENT LEVEL:

Kilocalories	2400
Protein	105 gm
Carbohydrate	310 gm
Fat	90 gm

SUGGESTED MENU PATTERN:

Breakfast

1 svg Fruit and/or
4 oz Juice
6 oz Cereal, Hot or
1 oz Cereal, Dry
1 Egg/Sub
2 slices Toast
1 tps Margarine
1 Jelly
8 oz Milk
6 oz Beverage

Noon

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

Evening

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

One package salt and pepper are served with each meal.

Two packages sugar are served with breakfast meal.

One package sugar is served with noon and evening meals.

FOOD LIST:

Food Group

BEVERAGES

Foods Allowed

Coffee; tea; green tea

Not Allowed

Alcoholic; black tea;
cocoa; cola beverages;
instant coffee; Ovaltine

BREADS

All breads, crackers and
rolls except those listed to
avoid

Any bread products
made with poppy seed
restricted fruits or nuts;
wheat germ or wheat
bran; soybean crackers

CEREALS

Cooked or ready-to-eat
cereals

Any with bran, chocolate,
restricted fruits or nuts,
wheat germ or wheat bran;
white corn grits

DESSERTS

All cakes, cookies, ice
cream, ice milk, pies,
puddings and sherbet

Any with chocolate, cocoa,
restricted fruits or nuts;
gelatin

FATS

All except those not allowed

Nuts of any kind; peanut
butter

<u>Food Group</u>	<u>Foods Allowed</u>	<u>Not Allowed</u>
FRUIT AND FRUIT JUICES	Apples; apple juice; bananas; Bing or red cherries; black currants; seedless grapes; grapefruit; lemon juice; lime juice; mangoes; melon; nectarines; peaches; pears; canned pineapple; prunes; grape juice; orange juice (limited to 4 oz/day)	All others
<u>MEAT GROUP:</u>		
CHEESE	All	None
EGGS	All	None
FISH	All	None
MEAT/MEAT SUBSTITUTES	All except those not allowed	Dried beans and peas; tofu; peanut butter
POULTRY	All	None
MILK AND MILK PRODUCTS	All except those not allowed	Chocolate milk; any milk products prepared with restricted ingredients
POTATOES AND POTATO SUBSTITUTES	Noodles; pastas; rice; white potatoes	Sweet potatoes; yams; spinach pastas
SOUPS	All prepared with allowed foods	All others
SWEETS	Candy prepared with allowed foods; corn syrup; jam; jelly, and marmalade and preserves prepared with allowed fruits; marshmallows; sugar	All with chocolate; fruit cake; gelatin; restricted fruits or nuts
VEGETABLES AND VEGETABLE JUICES	Cabbage; cauliflower; corn; lettuce; fresh and frozen lima beans; mushrooms; onions; parsnips; peas; radishes; ripe tomatoes; tomato juice; turnips	All not listed as allowed
MISCELLANEOUS	Herbs; salt; spices; vinegar	Chocolate; cocoa; poppy seeds

Note: Oxalate values are not available for all common foods; therefore, listing is incomplete.

REFERENCES FOR LOW OXALATE DIET:

1. American Dietetic Association. *Manual of Clinical Dietetics*. 4th ed. American Dietetic Association; 1992.
2. Curhan GC, Curhan SG. Dietary factors and kidney stone formation. *Comprehensive Therapy*. 1994; 20(9): 485-489.
3. Massey LK, Roman-Smith H, Sutton R. Effect of dietary oxalate and calcium on urinary oxalate and risk formation of calcium oxalate kidney stones. *J Am Diet Assoc*. 1993; 93(8): 901-906.
4. Massey L, Sutton R. Modification of dietary oxalate and calcium reduces urinary oxalate in hyperoxaluric patients with kidney stones. *J Am Diet Assoc*. 1993; 93(11): 1305-1307.
5. Nelson JK, Moxness KE, Jensen MD, Gastineau CF. *Mayo Clinic Diet Manual*. 7th ed. St. Louis, MO: Mosby Year Book, Inc.; 1994.

RENAL DIET

PURPOSES:

The purpose of this diet is to slow the rate of decline in renal function and possibly delay initiation of dialysis.

This diet is designed for patients diagnosed with Chronic Renal Insufficiency (CRI) who are not receiving dialysis. The diet is restricted in protein in attempts to control the symptoms of uremia to compensate for the decrease in the kidney's ability to remove nitrogenous waste products. The main diet restrictions are protein and phosphorus. The diet content of sodium, potassium, fluid and calories can be adjusted to the individual's needs. Refer to dietary guidelines for a summary of the CRI Diet Recommendations.

DIET PRINCIPLES:

- 👉 The diet is individualized to the needs of each patient and is divided into food choice lists that are used to formulate the patient's meal pattern. See targeted nutrient level for standard pattern.
- 👉 The diet supplies >50-60% high biological value protein to provide essential amino acids.
- 👉 The diet is designed to be sufficient in calories to prevent catabolism of body protein and maintain body weight. Large amounts of carbohydrates and fats may be needed to meet calorie needs.
- 👉 Potassium chloride (salt substitutes) may need to be avoided for individuals with renal insufficiency.
- 👉 The diet should be realistic for home use and expected compliance should be assessed prior to counseling. A protein restriction of 50 gm or higher is usually recommended for discharge as it does not require utilization of special food items that may be difficult for patients to prepare or purchase.

The following dietary guidelines are recommended per day:*

Kilocalories	30-40 kcal/kg Ideal Body Weight (IBW) for Maintenance 20-30 kcal/kg IBW for weight loss. 40-50 kcal/kg IBW for weight gain.
Protein	.6-.8 gm/kg IBW (>50-60% high biological value protein) in Nephrotic Syndrome, Renal Insufficiency. 1-1.2 gm/kg IBW for hemodialysis
Sodium	1000-3000 mg if necessary per day. (Varies depending on disease etiology, urinary sodium excretion, sodium and/or fluid retention).
Potassium	Unrestricted unless serum level is elevated or Glomerular Filtration Rate (GFR) < 10 ml/minute.
Phosphorus	8-12 mg/kg IBW or 10-12 mg/gm dietary protein.
Fluid	Unrestricted until urine output decreases.

* For obese patients >125% IBW, calculate needs using an adjusted weight for obesity (see Appendix L).

TARGETED NUTRIENT LEVEL: (Based on Renal Choice List)

Kilocalories:	1800 - 2200	Sodium:	87 mEq (2000 mg)
Protein:	60 - 65 gm (62% high biological value)	Potassium:	51 - 64 mEq (2000-2500 mg)
Carbohydrate:	380 gm	Phosphorus:	55 mEq (860 mg)
		Fat	75 gm

ADEQUACY:

Vitamin and mineral supplementation are frequently necessary. A low protein and low phosphorus diet may be deficient in calcium, iron, vitamin B12, zinc, thiamin, riboflavin, and niacin.

SUGGESTED MENU PATTERN:

The sample menu listed below is designed and calculated using the Renal food choice list. Foods which are not listed in the choice list are to be limited.

Breakfast

1 svg Fruit and/or
4 oz Juice

6 oz Cereal, Hot or
1 oz Cereal, Dry

1 Egg
1 slice Toast
3 tsps Margarine
2 Jelly
4 oz Milk
6 oz Beverage

Noon

2 oz LS Meat
4 oz LS Potato Sub

2 oz LS Gravy
4 oz LS Vegetable

1 slice Bread
2 tsps Margarine
1 Jelly
4 oz Juice
1 svg Fruit /
Renal Dessert
6 oz Beverage

Evening

2 oz LS Meat
4 oz Potato/Pot.
Sub
2 oz LS Gravy
4 oz LS
Vegetable
1 slice Bread
3 tsps Margarine
1 Jelly
4 oz Juice
1 svg Fruit
4 oz Milk
6 oz Beverage

One package herb seasoning and pepper are served with each meal.
Two packages sugar are served with breakfast meal.

RENAL FOOD CHOICE LIST:

<u>Food Group</u>	<u>Foods Allowed</u>	<u>Not Allowed</u>
BEVERAGES	Carbonated beverages; Koolade, Lemonade, Crystal Light, Tang, Fruit Punch; Coffee (Regular or Decaf) Limit to 3 serving per day	All others
BREADS	Breads, any variety; crackers danish, donut; english muffin; french toast; bagel; rolls; muffins; pancakes; waffles; rice cakes; tortilla	Salted crackers and chips; products containing low sodium baking powder or low sodium baking soda; (Diabetics should avoid danish, pastry and donuts)
CEREALS	Bran flakes, cherrios, corn flakes, frosted mini wheats, puffed wheat and rice; rice krispies, shredded wheat, sugar smacks, cream of rice or wheat, farina, grits, oatmeal	Those with more than 3 grams of protein per serving. All bran, granola and cereals containing dried fruit and nuts. (Diabetics should avoid all sugar coated cereals)
DESSERTS	Limit to 1 serving per day. Angel Food Cake (2"), cake (2"), cookies (6 per serving), shortbread, sugar, vanilla wafer, fruit pie (1/8), gelatin, fruit crisp	All others (Diabetics should avoid frosted cakes and fruit pies made with sugar)
FATS	All	None
FRUITS AND FRUIT JUICES	Canned: Applesauce, apricots; cheeries, fruit cocktail, Mandarin oranges, peaches, Pears, pineapple Fresh: Apples, blackberries, blueberries, cherries, grapefruit; grapes, lemons, limes, peaches, plums, raspberries, rhubarb, strawberries, tangerine, watermelon	All others Apricots, fresh and dried; banana; cantaloupe; dates; honeydew; kiwi; nectarine; orange; papaya; prunes, dried; raisins

<u>Food Group</u>	<u>Foods Allowed</u>	<u>Not Allowed</u>
	Juices/Drinks: Apple, apricot, cranberry, grapefruit, grape, pear, pineapple	Orange and prune
<u>MEAT GROUP:</u> CHEESE	Mozzarella, swiss or low sodium	All others including processed low sodium cheese containing potassium additives
EGGS	All	None
FISH	Fresh or low sodium fish, salmon, tuna, Fresh scallops, shrimp and lobster	Canned, smoked or processed fish; fish in brine
MEAT/MEAT SUBSTITUTES	Beef, lamb, pork, veal	All regular canned, smoked, processed; salted meats, meats in brine, processed low sodium meats containing potassium additives
POULTRY	Chicken, turkey, wild game	All regular canned, smoked, processed; salted meats, meats in brine, processed low sodium meats containing potassium additives
MILK AND MILK PRODUCTS	Limit to ½ cup per day. All except those to avoid.	Buttermilk, chocolate milk
POTATOES AND POTATO SUBSTITUTES (Limit to 1 svg potato day)	Boiled Potato, french fries; barley, cooked; macaroni, noodles, pasta; rice	Baked potato, instant or quick cooking rice or macaroni products
SOUPS	None	All

Food Group**Foods Allowed****Not Allowed**

SWEETS

Cranberry sauce; honey;
jam; jelly; preserves;
maple syrup; corn syrup;
sugar, brown or granulated;
candy corn, gum drops;
hard candies; jelly beans;
life savers; lollipops; mints;
marshmallows

Avoid chocolate, candies
made with nuts, coconut;
ordered fruits. (Diabetics
should use only those
items which are available
in sugar free)

VEGETABLES AND
VEGETABLE JUICES

Asparagus; beans, green or
wax; broccoli; cabbage;
carrots; cauliflower; celery;
corn; cucumber; eggplant;
endive; escarole; lettuce;
mushrooms; onions; peas;
peppers; radishes; squash,
summer or zucchini

Artichokes, beets, brussel
sprouts; chard; okra;
parsnips; pumpkin;
rutabagas; spinach
(cooked or canned); sweet
potato; tomato (raw, puree
or sauce); turnips;
vegetable juice; winter
squash

LOW PHOSPHORUS DIET

PURPOSE:

Phosphorus is restricted to prevent hyperphosphatemia and renal osteodystrophy. Control of dietary phosphorus may be difficult because foods high in phosphorus are usually excellent sources of high biological value protein. Therefore, use of phosphate binders are necessary.

TARGETED NUTRIENT LEVEL:

Kilocalories	2400	Sodium	4 - 5 gm
Protein	85 gm	Carbohydrates	250 gm
Phosphorus	39-51 mEq (600-800 mg)		

SUGGESTED MENU PATTERN:

Breakfast

1 svg Fruit and/or
4 oz Juice
6 oz Cereal, Hot or
1 oz Cereal, Dry
* 1 Egg/ Sub
2 slices Toast
2 tsps Margarine
1 Jelly
4 oz Milk
6 oz Beverage

Noon

4 oz Juice
2 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable or
6 oz Soup/Crux
1 slice Bread
3 tsp Margarine
1 svg Fruit/Dessert
6 oz Beverage

Evening

4 oz Juice
2 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable
1 slice Bread
3 tsp Margarine
1 svg Fruit/Dessert
6 oz Beverage

One package salt and pepper are served with each meal.

Two packages sugar are served with breakfast meal.

One package sugar is served with noon and evening meals.

- 3 x week allowed egg yolk, egg substitute allowed as desired

The high phosphorus foods listed below would be avoided on this diet.

HIGH PHOSPHORUS FOODS

Meat, Fish, Poultry

Organ Meats
Salmon, canned with bones
Sardines, canned with bones

Meat Substitutes

Dried Beans
Eggs (3x week allowed yolk)
Lentils
Lima Beans
Peas
Seeds

Cereal & Grain Products

Bread, whole grain
Cake Mix
Cereal
 Bran
 Instant, hot
 Whole grain
Pancakes
Quick Breads
Waffles

Dairy Products

Cheese (except cottage cheese)
Cream
Custard
Ice Cream
Milk (4 oz. daily)
Milk-based beverages
Pudding
Yogurt

Beverages

Colas
Cocoa
Strawberry Soda

Miscellaneous

Chocolate
Mushroom

REFERENCES FOR HIGH PHOSPHORUS FOODS:

1. American Dietetic Association. *A Clinical Guide to Nutrition Care in End-Stage Renal Disease*. 2nd ed. Chicago, IL; 1994
2. American Dietetic Association and the National Kidney Foundation. *National Renal Diet Professional Guide*. Chicago, IL; 1993
3. Harum P. Vitamin, mineral and hormone interaction in renal bone disease. *Journal of Renal Nutrition*. 1993; 3(1):30-5
4. Pennington JA. *Bowes & Church's Food Values of Portions Commonly Used*. 16th Ed. Philadelphia, PA: Lippincott Publishers; 1994
5. Zeman FJ, Ney DM. *Application of Clinical Nutrition*. Englewood Cliffs, NJ: Prentis-Hall, Inc.; 1988.

ENTERAL DIETS - TUBE FEEDINGS

PURPOSE:

Enteral diets or tube feedings are used to provide nourishment for those patients who cannot consume adequate food orally to maintain or reach a state of optimum nutrition. Enteral tube feedings should be the primary mode of nutritional management in these patients if the intestinal tract is functioning. For information regarding individual facilities see Appendix N.

DIET PRINCIPLES:

- 👉 Indications for the use of tube feedings include:
 1. Mechanical impediments to eating or swallowing
 2. Prolonged anorexia/poor appetite
 3. Oral pathology
 4. Terminal cancer
 5. Extensive burns or trauma
 6. HIV positive and AIDS
 7. Preoperative and postoperative malnutrition
 8. Semi-consciousness or coma
 9. Primary malnutrition without organic cause
- 👉 Dietitians will calculate nutrient requirements and advise on the administration schedule of the tube feeding.
- 👉 Tube feeding orders should be individually prescribed and include: the route of administration, specific tube feeding product, total volume and/or daily calorie level to be provided by the feeding.
- 👉 Three types of administration systems are available:
 - 👉 bolus feeding by syringe
 - 👉 intermittent feeding by gravity drip or infusion pump
 - 👉 continuous feeding by infusion pump or gravity drip.

In general, continuous feeding schedules may be better tolerated upon initiation of tube feedings. If an intermittent method of tube feeding administration is desired, the feeding schedule can be gradually transitioned/adjusted. The bolus tube feeding method of delivery is seldom used due to increased potential for gastrointestinal intolerance.
- 👉 Patients who are on feedings with increased osmolality or with prolonged undernutrition may need to start tube feedings at diluted concentrations with gradual advancement of tube feeding strength to promote gastrointestinal adaptation.

- 👉 Standard tube feedings are generally started at full strength using isotonic, one calorie per milliliter formulas.
- 👉 Patients' feedings should be monitored daily. If intolerance develops after tube feeding advancement, the administration rate should be set-back to the previously tolerated rate, or the product should be diluted to half or three quarters strength. Advance the tube feeding as tolerated. **Do not alter strength and rate simultaneously.**
- 👉 Specific formulas are available for patients with renal, pulmonary, hepatic disease, or malabsorptive states. Contact the dietitian for assistance in determining appropriate formulas and indications for their use.
- 👉 Enteral products are listed in the categories based on their characteristics. Enteral product formularies are frequently updated and vary by facility. Dietitians should be consulted for the products currently available on the Nutrition and Food Service enteral product formulary.

TUBE FEEDING COMPLICATIONS AND/OR RELATED PROBLEMS:

- I. Diarrhea is frequently a complication of tube feedings. Possible causes include:
 - A. Excessive feeding of a concentrated or high osmolality formula.
 - B. Rapid administration of enteral product.
 - C. Feeding a chilled formula. All enteral products should be administered at room temperature.
 - D. Investigating other potential causes of diarrhea unrelated to the tube feeding; such as severe hypoalbuminemia, infectious diarrhea, Clostridium Difficile, and concomitant medications with a sorbitol base or containing magnesium.
- II. Precautions to take to avoid aspiration include the following:
 - A. Consider tube placement beyond the pyloric sphincter. Tube patency and condition of tube should be checked.
 - B. Position the head of the bed at 30-45 degrees.
 - C. Monitor gastric residuals every shift with continuous feedings and prior to administration of intermittent feedings.
 - D. Consider the use of small bore feeding tubes to increase lower esophageal sphincter pressure.
- III. Nausea, Vomiting and Abdominal Distention
 - A. Check gastric residuals and hold tube feeding if residual is excessive (usually two times infusion rate).
 - B. Consider continuous feeding regimen or decrease rate of infusion.
 - C. Evaluate the use of gastric stimulating medications.

- IV. Tube Occlusions
- A. Administer medications in liquid or elixir form. Avoid crushing medications and administering with the tube feeding. If crushed medications are the only alternative, mix medication with warm water and flush the tube after administration.
 - B. Avoid the use of bulking agents with enteral formulas.
 - C. Check medication for compatibility with enteral formulas.

CATEGORIES AND DESCRIPTIONS OF ENTERAL PRODUCTS:

ORAL SUPPLEMENTS

Enteral products in this category are often milk-based formulas. They are designed for patients having difficulty consuming adequate nutrition to meet metabolic needs. These formulas contain intact proteins and should be used solely for those patients with a normal functioning gastrointestinal tract. Since the majority of these products are milk-based, they are contraindicated in lactose intolerant patients.

Description of Products:

Calories: Range from 1-2 kcal/ml.

Protein: 20-65 gm/1000 kcal - 11-25% of kcal.

Some are ready to serve while others require minimal mixing. Available in a variety of flavors.

Products:

Carnation Instant Breakfast	Great Shake	Sustacal Powder
Delmark Instant Breakfast	Sustacal Pudding	Great Shake Jr.
Shake Ups	Shake Up Plus	Ensure Pudding
Forta Shake	Health Shake	

INTACT PROTEIN / ORAL SUPPLEMENTS

These products are designed for patients having difficulty consuming food orally to maintain adequate nutrition. These products are versatile enough in that flavored products can be consumed orally and unflavored varieties can be used for tube feedings.

Description of Products:

Calories: Range from 1-1.5 kcal/ml.

Protein: 35-42 gm/1000kcal or 14-16% of kcal.

Available in a variety of flavors and lactose free.

Products:

Sustacal Basic	Ensure	Sustacal Plus
Ensure Plus	Nutrilan	Ensure HN
Resource Standard	Ensure Plus HN	Resource Plus
Resource Fruit Beverage		

INTACT PROTEIN / TUBE FEEDING

The formulas in this category are lactose free and designed solely for tube feedings. These products are suitable for patients with a variety of caloric requirements. Products are available for patients with caloric needs of less than 2000 kcal with elevated nitrogen requirements as well as those patients with elevated caloric requirements or those who are volume sensitive.

Description of Products:

Calories: 1-2 kcal/ml.

Protein: 30-45gm/100kcal or 14-19% of kcal.

Low to moderate osmolality (300-700mOsm/kg H₂O). All are lactose free.

Products:

Magnacal	TwoCal HN	Isocal
Comply	Osmolite HN	Ultralan
Attain	Osmolite	Nitrolan
Isosource HN	Deliver 2.0	Isolan
Isosource Standard	Isocal HN	Entrition
Nutren 2.0	Nutren 1.5	Entrition HN
Nutren 1.0		

FIBER CONTAINING

These products are useful for patients whose sole source of nutrition is via tube feedings. These products contain fiber and facilitate normal bowel function in the tube fed patient. In select cases they are useful with patients suffering from gastrointestinal disturbances such as diarrhea or chronic constipation.

Description of Products:

Calories: 1-1.2 kcal/ml.

Protein: 36-45 gm/1000kcal or 14-18% of kcal.

Most are low in osmolality (300-450 mOsm/kg H₂O). Fiber source is a combination of soy and oat fiber or soy fiber.

Products:

Probalance	Promote	Fiberlan
Ultracal	Jevity	Fibersource
Fibersource HN	Profiber	NuBasics w/ Fiber*
Sustacal w/ Fiber*	Ensure w/ Fiber*	Nutren 1.0 w/ Fiber

*can be used as an oral supplement.

ELEMENTAL / SEMI-ELEMENTAL

Elemental products are chemically defined or predigested which require little or no digestion. They are designed for patients with partially functioning gastrointestinal tract. Some individuals with compromised gastrointestinal function (diarrhea secondary to hypoalbuminemia, abdominal surgery) benefit from semi-elemental formulas as these formulas contain dipeptides and tripeptides which are absorbed more efficiently.

Description of Products:

Calories: 1-1.5 kcal/ml.

Protein: 20-63 gm/100kcal or 8-25% kcal.

Some products can be used both orally or as a tube feeding. Osmolality of the products vary with ranges from low to moderate (270-650 mOsm/kg H₂O). Some have special additives (i.e. glutamine, arginine) or trace minerals added to the elemental formulas.

Products:

Crucial	Reabilan	Alitraq
Peptamen	Reabilan HN	Vital HN
Peptamen VHP	Criticare HN	SandoSource Peptide
Tolerex	Vivonex TEN	Vivonex Plus

DISEASE SPECIFIC / CRITICAL CARE

These enteral products have specific formulations to meet the metabolic needs of severely compromised patients. Clinical research is on going to improve the efficacy of enteral products by including specific micronutrients (zinc, selenium), amino acids (arginine), and structured lipids that may promote wound healing or enhance the immune function. This may have a positive effect on nutritional status and promote recovery. The clinical efficacy of these products has been challenged in research. Controversy exists as to whether these products are more effective than standard enteral formulas. Disease specific formulas are available in the following categories:

Renal	Hepatic	Pulmonary
Critical Care	Diabetes/Glucose Intolerance	Wound Healing

Some of the products from the Elemental/Semi-Elemental may also be classified in this category.

Any questions regarding the specific characteristics, designated use or availability of these enteral products at your institution should be referred to the dietitian.

REFERENCES FOR ENTERAL DIETS-TUBE FEEDINGS:

1. Bell SJ, Borlase BC, Swails W, Dascoulias K, Ainsley B, Forse, RA. Experience with enteral nutrition in a hospital population of acutely ill patients. *J Am Diet Assoc.* 1994; 94: 414- 419.
2. Bell SJ, Mascolli EA, Bistran BR, Blackburn GL. Alternate lipid sources for enteral and parenteral nutrition: long and medium-chain triglycerides, structured triglycerides and fish oils. *J Am Diet Assoc.* 1991; 91: 74-78.
3. Bernhard-Lee N, Chou S. Enteral feedings: monitoring, complications, troubleshooting. *Patient Care News.* Sherwood Medical Company; 1991.
4. Bockus S. Troubleshooting your tube feedings: solutions for tube feeding dilemmas from verifying correct placement to determining diarrhea. *Am J Nurs.* 1991; 24-28.
5. Bowling TE, Silk DB. Refeeding remembered. *Nutrition.* 1995; 11(1): 32-34.
6. Cabre` E, Grassull MA. Complications of enteral feeding. *Nutritional International. The Journal of Applied and Basic Nutritional Sciences.* 1993; 9(1): 3-9.
7. Darmaun D, Just B, Missing B, Rongier M, Thuillier F, Koziat J, Grasset E. Glutamine metabolism in healthy adult men: response to enteral and intravenous feeding. *Am J Clin Nutr.* 1994; 59:1395 -1402.
8. Heyland DK, Cook DJ, Guyatt GH. Does the formulation of enteral products influence infectious morbidity and mortality rates in the critically ill patient? A critical review of evidence. *Critical Care Medicine.* 1994; 22:1192-1202.
9. Kemen M, Senkal M, Homan HH, Munne A, Dauphin AK, Baier J, Windeler J, Neumann H, Zumbel V. Early postoperative enteral nutrition with arginine -w-3 fatty acids and ribonucleic acid-supplemented diet versus placebo in cancer patients: an immunologic evaluation of Impact. *Critical Care Medicine.* 1995; 23:652-659.
10. Lacy JA. Immune function and nutrition support. *RD. Essential News for Dietitians* from Sandoz Nutrition. 1994; 13(3):1-10.
11. Mayhew SL, Thorn D. Enteral nutrition support: an overview. Pharmacist play an integral role in the nutritional health of patients. American Pharmaceutical Association; 1995.
12. Morbarhan S, Trumbore LS. Enteral tube feeding: a clinical perspective on recent advances. *Nutrition Reviews.* 1991; 49(5):129-139.

REFERENCES FOR ENTERAL DIETS-TUBE FEEDINGS, CONTINUED:

13. Skipper, A. Dietitian's Handbook of Enteral and Parenteral Nutrition. Rockville, Maryland: Aspen Publishers; 1989.
14. Zaloga, GP. *Nutrition in Critical Care: Enteral Nutrition*. St. Louis, MO: Mosby Yearbook, Inc.; 1994.
15. Zeigler F, Cynober L, Masini JP, Coudray-Lucas C, Levy E, Giboudeau J. Efficiency of enteral nitrogen support in surgical patients: small peptides vs. non-degraded protein. *Gut*. 1990; 31:1277-1283.

LOW RESIDUE DIET

PURPOSE:

The purpose of this diet is to provide foods which will leave only small amounts of residue in the intestine or lower bowel. Fat mal-absorption has also been indicated in radiation-induced diarrhea. This diet is designed primarily for persons receiving radiation to the lower bowel and pelvis, to decrease the cathartic effect of radiation to the lower bowel.

DIET PRINCIPLES:

- 👉 Foods that are high in fiber, or roughage, should be omitted. Items which contain rough skins, seeds, whole grains, or nuts should be avoided. Raw vegetables are high in fiber and are not to be used.
- 👉 Certain foods tend to be poorly or incompletely digested, and consequently, are to be avoided. These include tough meat, fried foods of all kinds, strongly flavored vegetables such as cabbage, broccoli, brussel sprouts, and rich pastries or desserts.
- 👉 Milk forms a hard curd upon entering the digestive process, and is tough to leave a large amount of residue in the colon. For this reason, milk is limited to not more than 2 cups (1 pint) a day.
- 👉 Fat is also difficult to digest and is therefore limited. Foods are prepared without fat. Sauces, gravies, cream, lard, butter, chocolate, nuts, avocado and rich desserts are eliminated. "Meats may contain appreciable amounts of fat. Lean trimmed cuts of meat are acceptable."

TARGETED NUTRIENT LEVEL:

Kilocalories	1741	Sodium	2182 mg
Protein	88 gm	Potassium	3057 mg
Carbohydrate	251 gm		
Fat	44 gm		

SUGGESTED MENU PATTERN:

Breakfast

1 svg Fruit and/or
4 oz Juice
6 oz Cereal, Hot or
1 oz Cereal Dry
1 Egg/Sub
2 slices Toast
2 tsps Margarine
1 Jelly
8 oz Milk
6 oz Beverage

Noon

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable or
6 oz Soup/Crax
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
1 Creamer
6 oz Beverage

Evening

3 Meat/Sub
4 oz Potato/Sub
4 oz Vegetable
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
1 Creamer
6 oz Beverage

One package salt and pepper are served with each meal.
Two packages sugar are served with the breakfast meal.
Two packages sugar are served with the noon and evening meals.

FOOD LIST:

Food Group

Foods Allowed

Not Allowed

BEVERAGES

Carbonated beverages;
Coffee; tea

None

BREADS

Enriched white or
seedless rye bread or rolls,
cornbread, saltines, soda
crackers, rusk, Zwieback®,
melba toast, and graham
crackers, english muffins

All bread, rolls, or crackers
containing whole grain flour;
bran, barley, seeds or nuts.

CEREALS

Prepared rice and corn
cereal, refined cooked
cereal such as cornmeal,
Cream of Rice®,
and wheat, farina,
oatmeal, petti-john

Unrefined or whole grain
prepared or cooked cereal, such
as All Bran®, Shredded
Wheat®, wheatena

DESSERTS

All except those not allowed

All desserts containing coconut,
seeds and nuts.

<u>Food Group</u>	<u>Foods Allowed</u>	<u>Not Allowed</u>
FATS	Maximum of three teaspoons (1 Tbsp.) daily of butter, fat free gravy, margarine, vegetable oil, mayonnaise or bland salad dressings	None
FRUITS AND FRUIT JUICES	All fruit juices and nectars, ripe banana, canned fruit such as applesauce, apricots, cherries, peaches, pears, grapefruit and orange sections (without skin or seeds), baked apple without skin, pureed dried fruit, canned fruit cocktail	Raw fruit except banana. All other canned fruit, dried fruit unless pureed, avocado
<u>MEAT GROUP:</u> CHEESE	All	None
EGGS	Limited to 1 a day, may be boiled, scrambled, poached, egg whites as desired	None
FISH	Fish, Shellfish, waterpacked tuna or salmon	Fried fish, fish canned in oil
MEAT	Broiled, roasted or stewed Tender <u>lean</u> beef, pork, ham, Veal, liver	Fried meat, sausage, bacon cold cuts, frankfurters, meat canned in oil
MEAT SUBSTITUTE	None	Legumes, peanut butter
POULTRY	Skinless chicken or turkey	Fried poultry, duck, goose
MILK AND MILK PRODUCTS	Milk limited to 1 pint a day including milk used in cooking	Milk in excess of 1 pint

<u>Food Group</u>	<u>Foods Allowed</u>	<u>Not Allowed</u>
POTATOES AND POTATO SUBSTITUTES	White or sweet potato, without skin, hominy grits, macaroni, refined rice, noodles, spaghetti, and vermicelli	Unpeeled potato, fried potato potato chips, whole grain rice, wild rice
SOUPS	Bouillon, clear broth, cream soup made from allowed vegetables	All other soup
SWEETS	Honey, jelly, molasses, sugar, syrup, fruits, hard candy, jelly beans, gum drops	Chocolate, all candy made with fat, cream, coconut, milk, fruit or nuts, seeds, jam, marmalade, whole cranberry sauce
VEGETABLES AND VEGETABLE JUICES	Vegetable juices, pureed vegetables or whole, tender cooked asparagus tips, beets, carrots, green or wax beans, chopped spinach, pumpkin, mushrooms, squash, baby lima beans, pureed tomatoes without added fat	All raw vegetables, all other cooked vegetables. All buttered, creamed or fried vegetables
MISCELLANEOUS	Fat free gravy, Mild spices in moderate amounts, vinegar, mild catsup	Fried food, garlic, nuts, olives, pickles, popcorn, relish, chili, coconut, horseradish, mustard

REFERENCES FOR LOW RESIDUE DIET:

1. Bosseus, I, ET AL, *Effect of a Low Fat Diet on Bile Salt Excretion and Diarrhea in Gastrointestinal Radiation Syndrome*. ACTA Radiologic Oncology, 18 (1979), 460-464
2. Francis Stern Nutrition Center Pelvic Irradiation Diet, New England Medical Center Hospitals

LOW GLUTEN DIET

PURPOSE:

This diet is designed for use in the treatment and management of gluten-induced enteropathies. It restricts foods which contain gluten and gliaden for the treatment of celiac disease, non-tropical sprue, or idiopathic steatorrhea.

DIET PRINCIPLES:

- 👉 Foods prepared with barley, bran, buckwheat, bulgur, malt, millet, oats*, rye and wheat are omitted.
- 👉 Foods prepared with corn, lima bean, potato, rice or soy flours are allowed.
- 👉 Arrowroot, cornstarch and tapioca are used for thickening.
- 👉 Labels (especially of packaged and prepared foods) should be checked carefully as they may contain gluten in the form of fillers; such as; Hydrolyzed Vegetable Protein (HVP) or Textured Vegetable Protein (TVP), flavorings or stabilizers. Contact manufacturer for clarification of questionable ingredients.

- * Consuming moderate amounts of oats, 50 gm per day, has been tolerated in adults who are in remission of Celiac disease and in adults with newly diagnosed Celiac disease. Oats should be avoided in patients with inflammation or severe Celiac disease. (One serving of cooked oats equals 40 gm of oats.)

TARGETED NUTRIENT LEVEL:

Kilocalories	2400	Fat	90 gm
Protein	105 gm	Carbohydrates	300 gm

ADEQUACY:

If foods are properly chosen, this diet will meet the Recommended Dietary Allowances. It may be necessary to supplement with various nutrients when malabsorption exists. Supplements may include fat soluble vitamins A, D, E and K, calcium, iron, magnesium, Vitamin B12 , folate and thiamin.

SUGGESTED MENU PATTERN:

Breakfast

1 svg Fruit and/or
4 oz Juice
6 oz Cereal, Hot or
1 oz Cereal, Dry
1 Egg/Sub
2 slices Bread*
2 tsps Margarine
8 oz Milk
6 oz Beverage

Noon

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable or
6 oz Soup/Crux
1 slice Bread*
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

Evening

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable or
2 oz Salad
1 pkg Salad Dressing
1 slice Bread*
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

*Caution see allowed breads

One package salt package pepper are served with each meal.

Two packages sugar are served with breakfast meal.

One package of sugar are served with noon and evening meals.

FOOD LIST:

Food Group

BEVERAGES

Foods Allowed

Carbonated beverages;
fruit drinks; pure cocoa
powder; coffee; tea

Not Allowed

Alcoholic beverages; cereal
beverages; hot cocoa mixes;
coffee or tea containing cereal;
creme soda; ginger ale; Ovaltine;
postum; root beer

BREADS

Breads, chips, crackers,
dough, muffins, pancakes
rolls, tortillas, waffles
prepared with arrowroot,
corn, corn meal, cornstarch,
lima bean flour; poi; potato
starch; brown and white
rice; soybean or tapioca
flour; corn bread, rice cakes

Any breads and products made
with barley, bran, buckwheat,
bulgur, durum, graham, kasha,
malt, oats*, rye or wheat flour;
commercial bread crumbs; yeast
and quick bread mixes;
dumplings; matzos; melba toast;
muffins; pancakes; prepared
mixes; pretzels; rusk; Rye
Krisp®; stuffing; sweet rolls; flour
tortillas; waffles

CEREALS

Cooked or ready-to-eat
cereals made from corn
or rice; cornmeal, Cream
of Rice®, grits or hominy

All cooked and ready-to-eat
cereals containing restricted
cereal grain; kasha; wheat
germ

Food Group**DESSERTS****Foods Allowed**

Cakes; cookies; custard, gelatin; Italian or water ices; homemade ice cream; meringue, pastries, pies, puddings, sherbet and rennet desserts prepared with allowed ingredients

Not Allowed

Commercially prepared cakes, cookies, doughnuts; ice cream; ice cream cones; pastries; pies; prepared mixes

FATS

Butter; cream; cream substitutes; French or home-made salad dressing made from apple cider, rice, or wine vinegar; gravies prepared with allowed flours; margarine; nuts; olives; pure mayonnaise; vegetable oils or shortening

Commercial or other salad dressings containing malt vinegar or thickened with rye, wheat or other flour or gluten stabilizers; non-dairy substitutes; thickened gravies, sauces unless prepared with allowed foods

FRUITS AND FRUIT JUICES

All except those not allowed

Commercial pie fillings and thickened or prepared fruit or juice that contains gluten or its derivative

MEAT GROUP:**CHEESE**

Natural aged cheeses; cream and cottage cheese

Any cheese prepared with gluten or derivative; cheese sauces

EGGS

All fresh or frozen eggs; egg substitutes

Any prepared with gluten or its derivative

FISH

All fish and shellfish except those not allowed

Any breaded fish or shellfish; canned or frozen fish in liquid containing gluten or its derivatives

MEAT

All meat except those not allowed; 100% pure cold cuts, and hot dogs

All breaded or floured meats with canned or frozen meats gravies or sauces; luncheon meats; sausages; chili con carne; any meats with extenders of HVP, TVP

MEAT SUBSTITUTE

Dried beans and peas; lentils; peanut butter; soybeans; tofu and others except those not allowed

Any prepared with gluten or its derivative; HVP, TVP

<u>Food Group</u>	<u>Foods Allowed</u>	<u>Not Allowed</u>
POULTRY	All except those not allowed	Breaded or canned chicken; any poultry hydrolyzed with TVP or HVP injected as part of the basting solution
MILK AND MILK PRODUCTS	All those except those not allowed	Milk drinks containing malt or other gluten derivatives; milkshakes; chocolate milk
POTATOES AND POTATO SUBSTITUTES	Corn chips without wheat; gluten-free (low protein) noodles; pasta made with allowed flours; potato chips; sweet and white potatoes; enriched or wild rice, some Oriental rice or bean noodles (see ingredient label); yams	Barley; bran; dumplings; macaroni; pasta; regular noodles; spaghetti; potato or rice prepared with bread, cracker crumbs or sauces/gravies which may contain gluten
SOUPS	Pure broth; vegetable soups; cream soups made from allowed flour	Commercially prepared soups made with barley, bran, buck wheat, malt, oat* or wheat products; bouillon and bouillon cubes prepared with HVP
SWEETS	Coconut; corn syrup; hard candy and homemade candy with allowed ingredients; jam; jelly; marmalade; marshmallows; meringues; molasses; plain chocolate; preserves; pure baking chocolate; pure cocoa powder; pure maple syrup; sugar	Commercial candies containing cereal products; flavored syrups containing restricted grains or flour; imitation whipped topping
VEGETABLES AND VEGETABLE JUICES	All plain canned, cooked, fresh, frozen or raw vegetables; creamed vegetables thickened with cornstarch or other allowed starches; all vegetable juices	Vegetables prepared with commercial bread or cracker crumbs; vegetables in cheese or cream sauces or thickened with restricted flours
MISCELLANEOUS	Baking soda and powder; carob; coconut; cream of	Catsup; chewing gum; crunchy snack foods including chip

Food Group**Foods Allowed**

tartar; pepper; pickles;
popcorn; pure cocoa powder;
herbs and spices and
monosodium glutamate;
relishes; salt; soy sauce and
Worcestershire sauce
prepared with allowed
ingredients; apple cider, rice
and wine vinegar

Not Allowed

and dip products and mixes;
mustard; seasoning and spice
blends; distilled white vinegar

REFERENCES FOR LOW GLUTEN DIET:

1. Aspen Reference Group. *Dietitian's Patient Education Manual*. Vol 1. Gaithersburg MD: Aspen Publishers Inc.; 1991 (revised 1993).
2. Chicago and South Suburban Dietetic Association. *Manual of Clinical Dietetics*. 4th ed. Chicago, IL: American Dietetic Association; 1992.
3. Escott-Stump S. *Nutrition and Diagnosis-Related Care*. 3rd ed. Philadelphia, PA: Lea and Febiger; 1992.
4. Janatuinen EK, Pikkarainen PH, Kempainen TA, Kosma VM, Jarvinen R, Uusitupa M, Julkunen JK. A comparison of diets with and without oats in adults with celiac disease. *N Eng J Med*. 1995; 333:1033-37.
5. Nelson JK, Moxness KE, Jensen MD, Gastineau CF. *Mayo Clinic Diet Manual*. 7th ed. St. Louis, MO: Mosby Year Book, Inc.; 1994.
6. Pennington JA., *Bowes and Church's Food Values of Portions Commonly Used*. 16th ed. Philadelphia, PA: Lippincott Publishers; 1994.
7. Robinson CH, Weisley ES, Mueller DH. *Basic Nutrition and Diet Therapy*. 7th ed. New York, NY: Macmillan Publishing Co.; 1993.
8. Rodwell-Williams S. *Nutrition and Diet Therapy*. 7th ed. St. Louis, MO: Mosby Year Book, Inc.; 1993.
9. Thompson T. Do oats belong in a gluten free diet? *J Am Diet Assoc*. 1997; 97: 1413-1416.
10. Zeman F. *Clinical Nutrition and Dietetics*. 2nd ed. New York, NY: Macmillan Publishing Co.; 1991

NEUTROPENIC DIET

PURPOSE:

This diet restricts foods with pathogenic bacteria for patients at increased risk of life-threatening infections. This diet is primarily for immunosuppressed patients who are placed in reverse isolation during hospitalization and are anticipated to be granulocytopenic for greater than 5 days duration.

DIET PRINCIPLES:

- 👍 Foods that harbor gram negative bacilli, yeasts, or molds are either well cooked or deleted from the diet.
- 👍 Uncooked foods and raw fruits and vegetables are not served.
- 👍 Safe food handling needs to be practiced.
- 👍 The following should be individually wrapped: breads, cereals, chips, cookies, crackers, commercial desserts, candies, condiments, margarine and pretzels.
- 👍 Fruit and vegetable juices should be canned, bottled or irradiated.

TARGETED NUTRIENT LEVEL:

Kilocalories	2400	Fat	90 gm
Protein	105 gm	Carbohydrates	300 gm

SUGGESTED MENU PATTERN:

Breakfast

1 svg Fruit and/or
4 oz Juice
6 oz Cereal, Hot or
1 oz Cereal, Dry
1 Egg/Sub
2 slices Toast
2 tsps Margarine
1 Jelly
8 oz Milk
6 oz Beverage

Noon

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable or
6 oz Soup/Crax
1 slice Bread
1 tsp Margarine
1 svg Canned Fruit or
Dessert
8 oz Milk
6 oz Beverage

Evening

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable
1 slice Bread
1 tsp Margarine
1 svg Canned Fruit
or Dessert
8 oz Milk
6 oz Beverage

One package salt and pepper are served with each meal.

Two packages sugar are served with breakfast meal.

One package of sugar are served with noon and evening meals.

FOOD LIST:

Food Group

BEVERAGES

Foods Allowed

Carbonated beverages;
cocoa; coffee; tea

Not Allowed

Alcoholic beverages

BREADS

Commercially wrapped and
individually packaged bakery
items; breads; crackers;
French toast; pancakes;
waffles

Any with dried fruits or
seeds; loaf breads or bulk
packed rolls

CEREALS

All individually packaged dry
cereals; cooked cereals
seeds

Bulk pack dry cereal;
cereals with dried fruits or

DESSERTS

Individual commercially
packaged cakes and cookies,
custard; hard ice cream;
pudding; sherbet; gelatin

Homemade ice cream,
ices, pudding and sherbet;
soft ice cream; yogurt;
pies

<u>Food Group</u>	<u>Foods Allowed</u>	<u>Not Allowed</u>
FATS	Well cooked bacon; butter; cream; cream substitute; gravies; margarine; oil; salad dressings; sauces; shortening; sour cream; whipped cream or topping	None
FRUITS AND FRUIT JUICES	Canned fruits, fruit juices and nectars; bottled fruit juices and nectars	Dried, fresh or frozen fruits; all other fruit juice
<u>MEAT GROUP:</u> CHEESE	All	None
EGGS	Hard cooked; well cooked scrambled eggs or egg substitute	Fried, raw, soft or under-cooked eggs; egg salad
FISH	Well cooked or canned fish or shellfish	Raw, rare or medium cooked fish or shellfish; stir fried or quick cooked fish salads
MEAT/MEAT SUBSTITUTES	Well cooked beef, lamb, pork, veal; cooked dried beans or peas as hash; meat salads	Cold cuts; raw, rare or medium cooked meats; stir fried or quick cooked such
POULTRY	Well cooked chicken or turkey	Undercooked poultry; stir fried; poultry salads
MILK AND MILK PRODUCTS	All cream, half and half, and milk; milkshakes made with commercial hard ice cream	Milkshakes made with non-commercial hard ice cream or soft serve ice cream
POTATO AND POTATO SUBSTITUTES	Barley; noodles; pasta; individually packaged potato chips; sweet and white potatoes; rice; spaghetti; yams	Pasta or potato salads; bulk packaged chips

<u>Food Group</u>	<u>Foods Allowed</u>	<u>Not Allowed</u>
SOUPS	Canned, dehydrated, frozen or homemade soups made with allowed ingredients	None
SWEETS	Individually packaged candy; chocolate; honey; jam; jelly; molasses; preserves; sugar; syrup	None
VEGETABLES AND VEGETABLE JUICES	Canned vegetables and juices; bottled vegetable juices; cooked fresh or frozen vegetables	All raw vegetables, including salads and garnishes; stir fried or undercooked vegetables
MISCELLANEOUS	Individual packets of allowed condiments; packaged snack foods; commercially packaged pickles; soy sauce; spices; vinegar; Worcestershire sauce	Herbs or spices after cooking

REFERENCES FOR NEUTROPENIC DIET:

1. Block, A. *Nutrition Management of the Cancer Patient*. 1st ed. Rockville, MD: Aspen Publishers, Inc.; 1990: 125-134.
2. Bohac C. Dietitian revises reduced bacteria diet. *Veteran's Administration Regional Highlighter-Dietetic Service*. 1991; 3: 6-7.
3. Carter L. Influences of nutrition and stress on people at risk for neutropenia: nursing applications. *Oncology Nursing Forum*. 1993; 20(8): 1241-1250.
4. Carter L. Bacterial translocation: nursing implications in the care of patients with neutropenia. *Oncology Nursing Forum*. 1994; 21(5): 857-865.
5. *Loyola University Medical Center Food Service/ARA Diet Manual*, 1993.
6. Nelson JK, Moxness KE, Jensen MD, Gastineau CF. *Mayo Clinic Diet Manual*. 7th ed. St. Louis, MO: Mosby Year Book, Inc.; 1994.
7. Moe G. Enteral feeding and infection in the immunocompromised patient. *Nutrition in Clinical Practice*. 1991; 6(2): 55-64.

LOW TYRAMINE DIET

PURPOSE:

This diet is designed for patients receiving anti-depressant monamine oxidase inhibiting drugs (MAOI) to prevent the hypertensive reactions associated with consuming foods containing tyramine and other amines, while receiving MAOI therapy.

DIET PRINCIPLES:

- 👉 Only major sources of tyramine in foods are excluded completely. Many foods with tyramine can be consumed in limited quantities.
- 👉 Counseling needs to begin before drug therapy is instituted. The Tyramine Controlled Diet should continue four weeks after discontinuation of MAOI.

TARGETED NUTRIENT LEVEL:

Kilocalories	2400	Fat	90 gm
Protein	105 gm	Carbohydrate	300 gm

SUGGESTED MENU PATTERN:

Breakfast

1 svg Fruit and/or
4 oz Juice
6 oz Cereal, Hot or
1 oz Cereal, Dry
1 Egg/Sub
2 slices Toast
2 tps Margarine
1 Jelly
8 oz Milk
6 oz Beverage

Noon

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable or
6 oz Soup/Crux
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

Evening

3 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

One package salt and pepper are served with each meal.

Two packages sugar are served with breakfast meal.

One package of sugar are served with noon and evening meals.

FOOD LIST:

<u>Food Group</u>	<u>Allowed</u>	<u>Not Allowed</u>
BEVERAGES	Limit cocoa, coffee, tea to maximum of 32 oz/day; soda to 48 oz/day; white wine to 6 oz/day if approved by physician	Alcohol: *ale, beer, Burgundy, Chianti, Sherry, Vermouth
BREADS	Limit sandwiches or crackers containing aged cheese	Homemade yeast breads with substantial quantities of yeast
CEREALS	None	None
DESSERTS	*Limit chocolate and products made with chocolate or cocoa to 4 oz/day	Those containing bananas or yeast such as banana bread or cake, coffee cakes, doughnuts, sweet rolls
FATS	Limit avocado to ½ cup/day	Salad dressings made with aged cheese
FRUITS AND FRUIT JUICES	Limit to one serving per day; bananas; dates; figs; raisins; raspberries; red plums	Overripe bananas and fruits
<u>MEAT GROUP:</u> CHEESES	Cream; cottage; farmer; ricotta; processed cheese slices	All others
EGGS	All eggs and egg substitutes	Pickled eggs
FISH	All fish, frozen or canned except those not allowed	Any smoked or pickled; herring; lox; anchovies; caviar

<u>Food Group</u>	<u>Allowed</u>	<u>Not Allowed</u>
MEAT/MEAT SUBSTITUTES	All beef, pork, lamb and veal except those not allowed	Any aged, dried, fermented, pickled, salted, or smoked meats, lunch meats, sausages, and processed meats (bologna, corned beef, ham, pepperoni, salami); fermented soybean products (miso, some tofu products); liver; liver pate; meat extracts
POULTRY	All except those not allowed	Any smoked or pickled poultry; organ meats
MILK AND MILK PRODUCTS	Limit buttermilk, cultured dairy products and sour cream to 4 oz/day; yogurt 8 oz/day	None
POTATO AND POTATO SUBSTITUTES	All except those not allowed	Any made with aged cheese
SOUPS	All except those not allowed	Cheese soups; vegetable soups made with excluded vegetables
SWEETS	*All products made with choco- late or cocoa	Any containing excluded fruits
VEGETABLES AND VEGETABLE JUICES	Limit tomato products to ½ cup/day	Eggplant; fava beans, including *Chinese pea pods and Italian beans; Italian green beans; sauerkraut; snow pea pods
MISCELLANEOUS	Limit soy sauce or teriyaki sauce to ½ cup/day	Accent, bovril, marmite, MSG

*These items may not be high in tyramine but may be high in other amines (dopamine, histidine) and may provoke an adverse reaction. Tolerance should be determined on an individual basis.

REFERENCES FOR TYRAMINE CONTROLLED DIET:

1. Chicago and South Suburban Dietetic Association. *Manual of Clinical Dietetics*. 4th ed. American Dietetic Association;1992.
2. Gray G, Gray L. Nutritional aspects of psychiatric disorders. *J Am Diet Assoc*. 1989; 89: 1492-8.
3. Nelson JK, Moxness KE, Jensen MD, Gastineau CF. *Mayo Clinic Diet Manual*. 7th ed. St. Louis, MO: Mosby Year Book, Inc.; 1994.
4. McCabe B. Dietary tyramine and other pressor amines in maoi regimens: a review. *J Am Diet Assoc*. 1986; 86:1059-64.
5. Shulman K, Walker S, Mackenzie S, Knowles S. Dietary restrictions, tyramine, and the use of monamine oxidase inhibitors. *J Clin Psychopharmacol*. 1989; 9: 397-401.

LOW PURINE DIET

PURPOSE:

This diet is designed to limit purine containing foods to aid in relieving the symptoms of gout.

DIET PRINCIPLES:

- 👉 Severe limitations of purine-containing foods are rarely indicated unless the ability to excrete uric acid is significantly reduced.
- 👉 The diet has a limited effectiveness without concurrent drug therapy.
- 👉 If diet is to be attempted, it is advisable to omit foods highest in purines (group III).
- 👉 A moderate level of protein (0.8 grams per kilogram body weight) and fat in the diet is recommended.
- 👉 Weight reduction is recommended for the obese patient. Avoid rapid weight loss.
- 👉 The patient should eliminate or restrict alcohol intake.
- 👉 A high fluid intake to maintain a urinary output of 2 liters per day is recommended.

TARGETED NUTRIENT LEVEL:

Kilocalories	2400	Sodium	3455 mg
Protein	90 gm	Potassium	3975 mg
Carbohydrate	305 gm		
Fat	75 gm		

PURINE LEVELS IN FOODS:

GROUP I

Cereals
Breads
Fats (in moderate)
Cheese

Low (0 to 15 mg)

Milk
Eggs
Fruits
Vegetables
Nuts
Sugar

GROUP II

Dried Legumes
Lentils
Asparagus
Peas
Meats

Moderate (50 to 150 mg)

Poultry
Fish and Seafood
Spinach
Mushrooms

GROUP III

Anchovies
Brains
Broth/Consommé
Heart
Herring
Kidney
Liver

High (Over 150 mg)

Mackerel
Meat Extracts and Gravies
Mincemeat
Mussels
Sardines
Scallops
Sweetbreads

SUGGESTED MENU PATTERN:

Breakfast

1 svg Fruit and/or
4 oz Juice
6 oz Cereal, Hot or
1 oz Cereal Dry
1 Egg/Sub
2 slices Toast
2 tsp Margarine
1 Jelly
8 oz Milk
6 oz Beverage

Noon

2 oz Meat/Sub
4 oz Potato/Sub
4 oz Vegetable
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

Evening

2 Meat/Sub
4 oz Potato/Sub
2 oz Vegetable
1 slice Bread
1 tsp Margarine
1 svg Fruit/Dessert
8 oz Milk
6 oz Beverage

One package salt and pepper are served with each meal.

Two packages of sugar are served with breakfast meal.

One package of sugar are served with noon and evening meals.

REFERENCES FOR LOW PURINE DIET:

1. Cataldo CB, Nyenhuis JR and Whitney EN. *Nutrition and Diet Therapy/Principles and Practice*. 2nd ed. St. Paul, MN: West Publishing Co.; 1989.
2. Krause MV and Mahon LK. *Food, Nutrition and Diet Therapy*. 7th ed. Philadelphia, PA: W.B. Saunders Co., 1984.
3. Lo B. Hyperuricemia and gout. *J Med* 142:104, 1985.
4. Palella TD and Kelley WN. An approach to hyperuricemia and gout. *Geriatrics* 39 (11):89, 1984.
5. Robinson CH and Weigley ES. *Basic Nutrition and Diet Therapy*. 5th ed. New York, NY: MacMillan Publishing Co., Inc.; 1984.

SPECIAL PROCEDURES-TEST DIETS

The Special Procedures test diets listed are specific to the Hines Veterans Affairs Hospital. As laboratory techniques vary between facilities, it is recommended that users of this diet manual check with their own laboratory for any dietary adjustments required for special procedures done at their facility. See diets referred to under restrictions in other sections of this manual for menu pattern, nutrient level and allowed foods.

<u>TEST</u>	<u>PURPOSE</u>	<u>DIETARY RESTRICTIONS</u>
ALDOSTERONE	Determination of primary aldosteronism	Dietary restrictions are not indicated. Laboratory Service however should be informed if the patient is receiving a normal sodium or restricted sodium diet when ordering the test.
BARIUM ENEMA	X-ray exam of lower bowel	NPO with laxatives after midnight the day of the test.
CATECHOLAMINE AND VMA (Vanillylmandelic Acid)	Diagnosis of pheochromocytoma tumors, detection of catecholamine or VMA in the urine	Regular diet. Laboratory techniques used at this facility are not affected by dietary intake.
COLONOSCOPY AND FLEXIBLE SIGMOIDOSCOPY	Detection of colon irregularities	Clear liquids the day before the test. Clear liquid breakfast is allowed only if test is scheduled for the afternoon; otherwise NPO day of the test.
FECAL FAT	Aids in diagnosis of steatorrhea	Regular diet providing 90 to 110 gms of fat per day for 3 days prior to exam with recommendations to consume all foods served on tray.
GLUCOSE TOLERANCE	Diagnosis of diabetes and impaired glucose tolerance	Regular diet for 3 days prior to test with recommendations to consume all foods served on tray. NPO 12-14 hours prior to test.

<u>TEST</u>	<u>PURPOSE</u>	<u>DIETARY RESTRICTIONS</u>
5-HIAA	Detection of possible carcinoid tumors	At least 24 hours prior to the urinalysis avoid avocados, bananas, eggplant, kiwi, passion fruit, pineapple, plantain, plums, tomatoes, vanilla, walnuts, and alcohol.
PRE-OP BOWEL	Bowel surgery	Clear liquids the day before the exam. Clear liquid breakfast is allowed only if the test is scheduled for the afternoon; otherwise NPO day of the exam.
RENIN	Detection of renin release in patients with renal or primary HTN	Dietary restrictions are not indicated, the laboratory technique is unaffected by dietary intake.

REFERENCES FOR TEST DIETS:

1. American Dietetic Association. *Manual of Clinical Dietetics*. 4th ed. American Dietetic Association.; 1992.
2. Feldman J, Lee E, Castleberry C. Catecholamine and serotonin content of foods: effect on urinary excretion of homovanillic and 5-hydroxyindoleacetic acid. *J Am Diet Assoc*. 1997; 87:1031-1035.
3. Fischbach F. *A Manual of Laboratory Diagnostic Tests*. 3rd ed. Philadelphia, PA: Lippincott Publishers.; 1989.
4. Nelson JK, Moxness KE, Jenson MD, Gastineau CF, *Mayo Clinic Diet Manual*. 7th ed. St. Louis, MO: Mosby Year Book, Inc.; 1994.
5. Wallach J. *Interpretation of Diagnostic Tests: A Synopsis of Laboratory Medicine*. 5th ed. Boston, MA: Little, Brown and Co.; 1992.

APPENDIX A

DIETARY GUIDELINES FOR AMERICANS - GUIDE FOR AN ADEQUATE HOSPITAL DIET:

In 1995 the U. S. Department of Agriculture and the Department of Health and Human services issued the revised publication: "Nutrition and Your Health: Dietary Guidelines for Americans". These guidelines are intended for healthy adults and may not be appropriate for individuals with special health or nutritional needs. However, since nutritional status is of importance to disease prevention and health maintenance, the dietary guidelines are appropriate in nutritional intervention and the promotion of good eating practices for the general hospital population. The Dietary Guidelines for Americans and their application to the hospital diet are as follows:

1. Eat A Variety of Foods

About forty nutrients are required to maintain good nutritional status. These nutrients include vitamins, minerals and sources of calories (protein, carbohydrate and fat). Most foods contain more than one nutrient but no single food can supply all the essential nutrients. A variety of foods consumed will decrease the likelihood that either an excess or a deficiency of any one nutrient will be consumed. A well-balanced diet includes foods from all the major food groups: for example, fruits, vegetables, bread, grains, meats, fish, poultry, eggs, legumes, milk, yogurt and cheese. The hospital diets are planned to provide a well-balanced diet which includes these foods.

2. Balance The Food You Eat With Physical Activity - Maintain Or Improve Your Weight

Maintenance or improvement of weight status is dependent on several factors such as body composition, distribution of fat, physical activity and weight-related medical problems. Being either overweight or underweight increases your chances of developing health problems. Obesity is linked with hypertension, diabetes, hyperlipidemia, certain cancers and other illnesses. Being underweight is linked to osteoporosis in women.

The Regular Diet is designed to meet the energy needs of adult males 51 years or older and adjusted to meet energy needs of females and males less than 51 years of age. When patients are overweight or underweight the calorie content of the diet must be altered to promote maintenance or improvement of body weight.

3. Choose A Diet With Plenty Of Grain Products, Vegetables And Fruits

Grain products, fruits and vegetables offer variety in the diet while providing little fat. Consuming adequate amounts of these foods insure a high fiber intake, as recommended by health authorities. It is recommended that adults consume at least six servings of grain products and two servings of fruit per day. The hospital menu is planned to include a variety of fruits, vegetables and grain products. Whole grain breads and cereals are available on the High Fiber Diet or at the request of the individual.

4. Choose A Diet Low In Fat, Saturated Fat And Cholesterol

A high fat diet is linked to heart disease, obesity and certain types of cancers. A low fat diet allows for a variety of nutrients to be consumed without exceeding the calorie needs of the individual.

The Regular Hospital Diet is designed to control fat intake to 30-35% of the total kilocalories. Margarine and 2% milk are served. Eggs are limited to three per week and egg substitute is used in preparation of omelets and French toast. Liver and organ meats are omitted. Fried and high fat items are restricted.

The Cardiac Diet further limits fat and cholesterol.

5. Choose A Diet Moderate In Sugars

Foods high in sugar tend to limit nutrients. In addition, many high sugar foods are also high in fat, and thus should be consumed in moderation.

The hospital menu provides desserts but controls the amount of high sugar/high fat desserts. Alternatives are provided such as fruits, skim milk puddings, and fruit ices.

6. Choose A Diet Moderate In Salt And Sodium

Table salt contains two essential nutrients, sodium and chloride. The typical American diet is high in sodium and salt. This can be detrimental as a high sodium intake may affect blood pressure in susceptible persons. The requirement for sodium is much less than most consume, therefore it is rarely harmful to decrease sodium intake.

The amount of sodium in the non-restricted hospital diet varies between 4 to 6 grams. Cured meat and processed foods are used in moderation to control sodium intake.

7. If You Drink Alcoholic Beverages, Do So In Moderation

Alcoholic beverages tend to be high in kilocalories and low in essential nutrients. These beverages are not served in the hospital. Patients who desire alcohol after discharge are advised to discuss this with their physician.

REFERENCES FOR DIETARY GUIDELINES:

1. Hahn NI. Variety is still the spice of a healthful diet. *J Am Diet Assoc.* 1995; 95: 1096-1098.
2. Kennedy E, Meyers L, Layden W. The 1995 dietary guidelines for Americans: an overview. *J Am Diet Assoc.* 1996; 96: 234-237.

APPENDIX B

MEDIAN HEIGHTS AND WEIGHTS AND RECOMMENDED ENERGY INTAKE:

Category	Age (years) or Condition	Weight		Height		REE ^a (kcal/day)	Average Energy Allowance (kcal) ^b		
		(kg)	(lb)	(cm)	(in)		Multiples of REE	Per kg	Per Day ^c
Infants	0.0-0.5	6	13	60	24	320		108	650
	0.5-1.0	9	20	71	28	500		98	850
Children	1-3	13	29	90	35	750		102	1,300
	4-6	20	44	112	44	950		90	1,800
	7-10	28	62	132	52	1,130		70	2,000
Males	11-14	45	99	157	62	1,440	1.70	55	2,500
	15-18	66	145	176	69	1,760	1.67	45	3,000
	19-24	72	160	177	70	1,780	1.67	40	2,900
	25-50	79	174	176	70	1,800	1.60	37	2,900
	51+	77	170	173	68	1,530	1.50	30	2,300
Females	11-14	46	101	157	62	1,310	1.67	47	2,200
	15-18	55	120	163	64	1,370	1.60	40	2,200
	19-24	58	128	164	65	1,350	1.60	38	2,200
	25-50	63	138	163	64	1,380	1.55	36	2,200
	51+	65	143	160	63	1,280	1.50	30	1,900
Pregnant	1st trimester								+0
	2nd trimester								+300
	3rd trimester								+300
Lactating	1st 6 months								+500
	2nd 6 months								+500

^a Calculation based on FAO equations (Table 3-1), then rounded.

^b In the range of light to moderate activity, the coefficient of variation is $\leq 20\%$.

^c Figure is rounded.

From the Recommended Dietary Allowance. 10th ed. Food and Nutrition Board. National Academy of Sciences-National Research Council.

SUGGESTED WEIGHTS FOR ADULTS:

Height*	Weight (lb) ^{+⊥}	
	19-34 y	≥35 y
5'0"	97-128	108-138
5'1"	101-132	111-143
5'2"	104-137	115-148
5'3"	107-141	119-152
5'4"	111-146	122-157
5'5"	114-150	126-162
5'6"	118-155	130-167
5'7"	121-160	134-172
5'8"	125-164	138-178
5'9"	129-169	142-183
5'10"	132-174	146-188
5'11"	136-179	151-194
6'0"	140-184	155-199
6'1"	144-189	159-205
6'2"	148-195	164-210
6'3"	152-200	168-216
6'4"	156-205	173-222
6'5"	160-211	177-228
6'6"	164-216	182-234

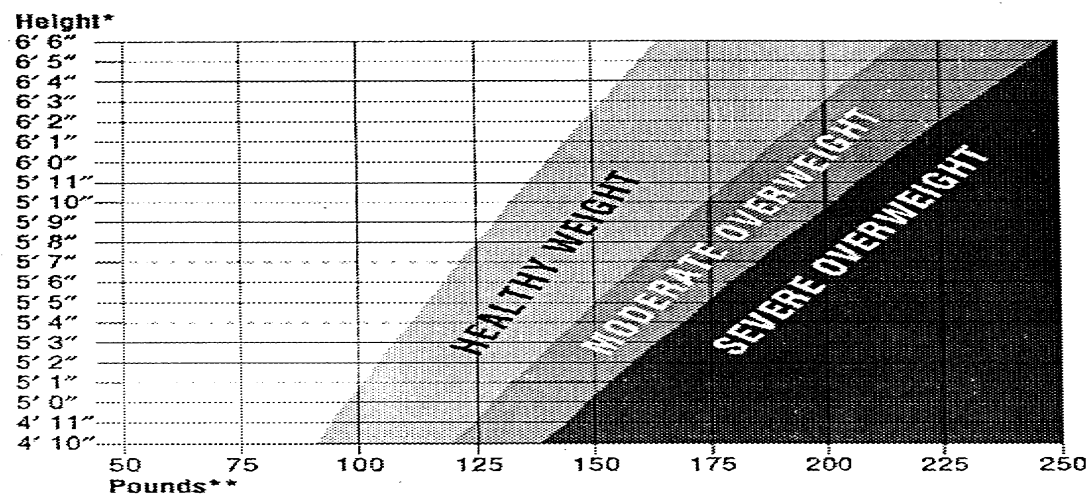
* Without shoes.

+ Without clothes.

⊥ The higher weights in the ranges generally apply to men, who tend to have more muscle and bone; the lower weights often apply to women, who have less muscle and bone.

Adapted from Nutrition and Your Health: Dietary Guidelines for Americans. 3 rd ed. Washington, DC: US Government Printing Office; 1990.

ARE YOU OVERWEIGHT?



Adapted from Nutrition and Your Health: Dietary Guidelines for Americans. 3rd ed. Washington, DC: US Government Printing Office; 1990.

Graph Source: Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans; 1995.

APPENDIX C

RECOMMENDED DIETARY ALLOWANCES:

FOOD AND NUTRITION BOARD, NATIONAL ACADEMY OF SCIENCES—NATIONAL RESEARCH COUNCIL
RECOMMENDED DIETARY ALLOWANCES,* Revised 1989. Designed for the maintenance of good nutrition of practically all
healthy people in the United States

Category	Age (y) or Condition	Weight† (kg)	Height† (cm)	Fat-Soluble Vitamins				Water-Soluble Vitamins				Minerals									
				A (µg RE)†	D (µg)†	E (mg α-TE)‡	K (µg)§	C (mg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg NE)¶	B ₆ (mg)	Folate (µg)	B ₁₂ (µg)	Calcium (mg)	Phosphorus (mg)	Magnesium (mg)	Iron (mg)	Zinc (mg)	Iodine (µg)	Selenium (µg)
Infants	0-0.5	6	13	375	7.5	3	5	30	0.3	0.4	0.5	0.3	25	0.3	400	300	40	6	5	40	10
	0.5-1.0	9	20	71	10	4	10	35	0.4	0.5	0.6	0.6	35	0.5	600	500	60	10	5	50	15
	1-3	13	29	90	10	6	15	40	0.7	0.8	1.1	1.0	50	0.7	800	800	80	10	10	70	20
Children	4-6	20	44	112	10	7	20	45	0.9	1.1	1.2	1.1	75	1.0	800	800	120	10	10	90	20
	7-10	28	62	132	10	7	30	45	1.0	1.2	1.3	1.4	100	1.4	800	800	170	10	10	120	30
	11-14	45	99	157	10	10	45	50	1.3	1.5	1.7	1.7	150	2.0	1200	1200	270	12	15	150	40
Males	15-18	66	145	176	10	10	65	60	1.5	1.8	2.0	2.0	200	2.0	1200	1200	400	12	15	150	50
	19-24	72	160	177	10	10	70	60	1.5	1.8	2.0	2.0	200	2.0	1200	1200	400	12	15	150	50
	25-50	72	160	177	10	10	70	60	1.5	1.8	2.0	2.0	200	2.0	1200	1200	400	12	15	150	50
Females	11-14	46	101	157	10	10	45	50	1.1	1.3	1.5	1.4	150	2.0	1200	1200	350	10	15	150	70
	15-18	55	120	163	10	8	55	60	1.1	1.3	1.5	1.5	180	2.0	1200	1200	280	15	12	150	45
	19-24	58	128	164	10	8	60	60	1.1	1.3	1.5	1.6	180	2.0	1200	1200	280	15	12	150	55
Pregnant Lactating	25-50	63	138	163	64	5	8	65	1.0	1.2	1.3	1.6	180	2.0	800	800	280	10	12	150	55
	51+	65	143	160	63	5	8	65	1.0	1.2	1.3	1.6	180	2.0	800	800	280	10	12	150	55
	1st 6 mo	65	143	160	63	5	8	65	1.0	1.2	1.3	1.6	180	2.0	800	800	280	10	12	150	55
	2nd 6 mo	62	138	160	63	5	8	65	1.0	1.2	1.3	1.6	180	2.0	800	800	280	10	12	150	55

* The allowances, expressed as average daily intakes over time, are intended to provide for individual variations among most normal persons as they live in the United States under usual environmental stresses. Diets should be based on a variety of common foods in order to provide other nutrients for which human requirements have been less well defined. See text for detailed discussion of allowances and of nutrients not tabulated.

† Weights and heights of Reference Adults are actual medians for the US population of the designated age, as reported by NHANES II. The median weights and heights of those under 19 years of age were taken from Hamill PVV, Drizd TA, Johnson CL, Reed RB, Roche AF, Moore WM. Physical growth: National Center for Health Statistics percentiles. *Am J Clin Nutr.* 1979;32:607-629. The use of these figures does not imply that the height-to-weight ratios are ideal.

‡ Retinol equivalents. 1 retinol equivalent = 1 µg retinol or 6 µg β-carotene.

§ As cholecalciferol. 10 µg cholecalciferol = 400 IU of vitamin D.

|| α-Tocopherol equivalents. 1 mg d-α tocopherol = 1 α-TE.

¶ 1 NE (niacin equivalent) is equal to 1 mg of niacin or 60 mg of dietary tryptophan.

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APPENDIX D

SUMMARY TABLE: ESTIMATED SAFE AND ADEQUATE DAILY DIETARY INTAKES OF SELECTED VITAMINS AND MINERALS:

Category	Age (years)	Vitamins	
		Biotin (µg)	Pantothenic Acid (mg)
Infants	0-0.5	10	2
	0.5-1	15	3
Children & adolescents	1-3	20	3
	4-6	25	3-4
	7-10	30	4-5
	11+	30-100	4-7
Adults		30-100	4-7

Category	Age (years)	Trace Elements ^a				
		Copper (mg)	Manganese (mg)	Fluoride (mg)	Chromium (µg)	Molybdenum (µg)
Infants	0-0.5	0.4-0.6	0.3-0.6	0.1-0.5	10-40	15-30
	0.5-1	0.6-0.7	0.6-1.0	0.2-1.0	20-60	20-40
Children & adolescents	1-3	0.7-1.0	1.0-1.5	0.5-1.5	20-80	25-50
	4-6	1.0-1.5	1.5-2.0	1.0-2.5	30-120	30-75
	7-10	1.0-2.0	2.0-3.0	1.5-2.5	50-200	50-150
	11+	1.5-2.5	2.0-5.0	1.5-2.5	50-200	75-250
Adults		1.5-3.0	2.0-5.0	1.5-4.0	50-200	75-250

Because there is less information on which to base allowances, these figures are not given in the main table of RDA and are provided here in the form of ranges of recommended intakes.

^a Since the toxic levels for many trace elements may be only several times usual intakes, the upper levels for the trace elements given in this table should not be habitually exceeded.

From Recommended Dietary Allowances. Revised 1989. Food and Nutrition Board, National Academy of Sciences-National Research Council.

APPENDIX E

CONVERSION EQUIVALENTS:

Ounces to grams, multiply ounces by 30
Grams to ounces, divide grams by 30
Pounds to kilograms, divide pounds by 2.2
Kilograms to pounds, multiply kilograms by 2.2
Inches to centimeters, multiply inches by 2.54
Specific weight of sodium chloride to sodium, multiply by .393
Grams of nitrogen to grams of protein, multiply by 6.25

1 kilocalorie	=	4.2 kilojoules.
1 g Carbohydrate	=	4 kilocalories or 17 kilojoules.
1 g Protein	=	4 kilocalories or 17 kilojoules.
1 g Fat	=	9 kilocalories or 38 kilojoules.
1 g Alcohol	=	7 kilocalories or 29 kilojoules.

To convert milligrams to milliequivalents, divide milligrams by atomic weight and multiply by the valence.

$$\text{mEq} = \frac{\text{mg per unit}}{\text{Atomic weight of ion}} \times \text{Valence}$$

<u>Element</u>	<u>Atomic Weight</u>	<u>Valence</u>
Calcium	40.08	2
Chlorine	35.46	1,2,5,7 (1 if a chloride)
Phosphorous	30.98	3, 5
Potassium	39.10	1
Sodium	23.00	1
Magnesium	24.32	2
Zinc	65.38	2
Iron	55.85	2 Ferrous, 3 Ferric

APPENDIX F

TABLE OF WEIGHTS AND MEASURES:

<u>Household</u>	<u>Weight (gm)</u>	<u>Volume Equivalent (cc)</u>
1/2 tsp	2.5	2.5
1 tsp	5	5
1 tbsp	15	15
1/2 cup	125	120
1 cup	250	240
1 pt	500	480
1 qt	1000	960

Measures of Weight

1 ounce	=	28.35 grams
1 kilogram	=	2.2 pounds
1 pound	=	453.6 grams
1 grain	=	0.065 grams

Abbreviations

kg	=	kilogram	=	1000 gm
mg	=	milligram	=	0.001 gm
µg	=	microgram	=	0.000001 gm
ng	=	nanogram	=	0.000000001 gm
pg	=	picogram	=	0.000000000001 gm

ml	=	milliliter
mm	=	millimeter
µm	=	micron
mEq	=	milliequivalent
mOsm	=	milliosmole
cc	=	cubic centimeter

APPENDIX G

BODY MASS INDEX (BMI)

Body Mass Index (BMI) is a practical, accurate method of assessing obesity. At present, this is considered the most satisfactory method of identifying obesity. It is shown to be a more representational measure of body fat weight than other frame size methods.

METHOD FOR DETERMINING BODY MASS INDEX:

$$\text{BMI} = \frac{\text{Weight (lbs.)} \times 0.4536}{\text{Height (inches)}^2}$$

or

$$\text{BMI} = \frac{\text{Weight (kg)}}{\text{Height (meter)}^2}$$

INTERPRETATION OF BODY MASS INDEX

	<u>General Guidelines</u>	<u>Desirable Ranges</u>
Underweight:	less than/equal to 20	Males: 21.9 - 22.4
Normal:	20.1 - 25.0	Females: 21.3 - 22.1
Overweight:	25.1 - 30.0	
Obese:	greater than 30	

**See also nomogram for predicting body mass index (BMI).

Studies now are showing a BMI of 27 or greater is associated with increased risk of developing comorbid conditions. These conditions are, but are not limited to, coronary heart disease, certain types of cancer, stroke, HTN, and Type 2 Diabetes. VA preventive health measures consider BMI over 27 as obese, and a significant health factor.

REFERENCES FOR BODY MASS INDEX (BMI):

1. Kuczmarski RJ, Flegal KM, Campbell SM, Johnson CL. Increasing prevalence of overweight among U.S. adults: the national health and nutrition examination surveys, 1960-1991. *JAMA*. 1994; 272: 205-211.
2. Manore M, Bernardot D, Love P. Body Measurements. In: Bernardot, D.,ed. *Sports Nutrition: A Guide for the Professional Working with Active People*. 2nd ed. Chicago, IL: American Dietetic Association; 1993.
3. Pi-Sunyer FX. Medical hazards of obesity. *Ann Intern Med*. 1993;119: 660-60.

APPENDIX H

PROCEDURE FOR CALCULATION OF DIABETIC DIET PRESCRIPTION:

1. Calculate patient's ideal weight using the standard below or by height-weight tables.

	Weight	Height
a. Adult female medium frame	100 lbs	5 feet
Add 5 pounds for each additional inch over 5 feet.		
b. Adult male medium frame	106 lbs	5 feet
Add 6 pounds for each additional inch over 5 feet.		
c. All adults:		
For large frame add 10% to ideal weight for medium frame.		
For small frame subtract 10% for ideal weight for medium frame.		

2. Calculate calorie requirement:

_____ Basal calories	(Adult, 10 calories/lb. ideal body weight)
_____ Activity calories	(30% for sedentary activity) (50% for moderate activity) (100% for strenuous activity)
_____ Total calories	

(An excess or deficit of 3500 calories per week when related to basal plus activity calorie requirements, will result in a weight gain or weight loss of about one pound, respectively. For each pound of desired weight change per week, there should be an adjustment \approx 500 calories per day).

3. Calculate carbohydrate, protein, and fat:

Carbohydrate	50-60% of calories
Protein	10-20% of calories
Fat	25-30% of calories

4. Distribute calories and carbohydrates as follows: 3/10, 3/10, 3/10, 1/10 throughout the day.

PROCEDURE FOR CALCULATION OF DIABETIC DIET PRESCRIPTIONS:

Sample Prescription

Carbohydrate (CHO) 195 g
 Protein 80 g
 Fat 75 g
 Calories 1800

	<u>Amount</u>	<u>CHO, gm</u>	<u>PRO, gm</u>	<u>FAT, gm</u>
Milk-2%	1 pint	24	16	10
Vegetable Exchange	1 cup	10	4	
Fruit	5 servings	75		
Total CHO from sources				
other than bread exchanges		109		
195 g CHO in prescription				
<u>-109 g</u> sources other than bread exchanges				
86 g \div 15 = 6 bread exchanges				
Bread exchanges	6	90	18	
Total Protein from sources				
other than meat exchange			38	
80 g Protein in prescription				
<u>-38 g</u> from sources other than meat exchanges				
42 g \div 7 = 6 meat exchanges				
Meat exchanges	6		42	30
Total Fat from sources				
other than fat exchanges				40
75 g fat in prescription				
<u>-40 g</u> from sources other than fat exchanges				
35 g \div 5 = 7 fat exchanges				
Fat exchanges	7			35
Total		199	80	75

APPENDIX I

FOOD VALUES FOR CALCULATING DIABETIC DIETS:

<u>Group</u>	<u>Amount</u>	<u>Weight gm</u>	<u>PRO gm</u>	<u>CHO gm</u>	<u>FAT gm</u>	<u>Calories</u>
Milk, 2%	1 pint	240	8	12	5	120
Milk, Skim	1 pint	240	8	12	0-3	90
Vegetable Exchange	1 cup	100	2	5	----	25
Vegetable Raw		*	*	As desired		* *
Fruit	Varies	----	----	15	----	60
Meat Exchange	1 oz	30	7	----	5	75
Fat Exchange	1 tsp	5	----	----	5	45
Bread Exchange	Varies	----	3	15	trace	80

APPENDIX I

FOOD VALUES FOR CALCULATING DIABETIC DIETS:

<u>Group</u>	<u>Amount</u>	<u>Weight gm</u>	<u>PRO gm</u>	<u>CHO gm</u>	<u>FAT gm</u>	<u>Calories</u>
Milk, 2%	1 pint	240	8	12	5	120
Milk, Skim	1 pint	240	8	12	0-3	90
Vegetable Exchange	1 cup	100	2	5	----	25
Vegetable Raw		*	*	As desired		* *
Fruit	Varies	----	----	15	----	60
Meat Exchange	1 oz	30	7	----	5	75
Fat Exchange	1 tsp	5	----	----	5	45
Bread Exchange	Varies	----	3	15	trace	80

APPENDIX J

Implementation for fluid restriction order

Total cc ordered by MD	Nursing Amount	Nutrition Amount
1000	520	480
1200	480	720
1500	480	1020
1800	480	1320
2000	500	1500

The following are the items the patient would receive on their tray (this is what will be printed on the tray ticket)

All patterns will have the restrictions:

NO: ice cream, popsicle, fudgesicle, gelatin, sundae, sherbet, creamsicle

Nutrition distribution of fluids at meals

Total cc ordered/ Nutrition amount	Breakfast	Noon	Evening
1000cc/480cc	120cc milk 120cc juice	120cc milk	120cc milk
1200cc/720cc	120cc milk 120cc juice	240cc milk	240cc milk
1500cc/1020cc	240cc milk 120cc juice 180cc beverage	240cc milk	240cc milk
1800cc/1320cc	240cc milk 120cc juice	240cc milk 180cc beverage	240cc milk 120cc juice
2000cc/1500cc	240cc milk 120cc juice 180cc beverage	240cc milk 180cc beverage	240cc milk 120cc juice 180cc beverage

APPENDIX K

Procedures for Calculating Glucose Absorption During CAPD

The calories absorbed from the dialysate during CAPD (Continuous Ambulatory Peritoneal Dialysis) should be considered when determining caloric requirements.

Percent Estimate Glucose Absorption

Grams of glucose per liter x Volume = Total grams glucose.

Note: An exchange may contain from 1.5 to 3 liters.

Total grams of glucose x Absorption rate (approximately 70%-80%) = grams of glucose absorbed.

Grams of glucose absorbed x Calories/grams glucose (3.4) = calories absorbed.

Dialysate Solutions

- 1.5% Solution contains 15.0 grams of glucose/liter.
- 2.5% Solution contains 25.0 grams of glucose/liter.
- 4.25% Solution contains 42.5 grams of glucose/liter.

REFERENCE:

1. American Dietetic Association. *A Clinical Guide to Nutrition Care in End-Stage Renal Disease*. Chicago, IL; 1994.

APPENDIX L

ADJUSTED BODY WEIGHT IN OBESITY:

$(ABW - IBW) \times .25 + IBW = \text{Adjusted Body Weight}$

ABW = Actual Body Weight

IBW = Ideal Body Weight

.25 = Only 25% of body fat tissue is metabolically active

REFERENCES:

1. Wilkens K. Adjustment for obesity. *American Dietetic Association Renal Practice Group Newsletter* ; Winter: 1994.